



**SALT LAKE COUNTY
STORMWATER COALITION**

***2023 WATER QUALITY
STUDENT GUIDE***

Thank you to



for providing us with this
great educational resource!

What is a Watershed?

NEEF We All Live in a Watershed

What is a watershed?

A watershed, also called a drainage basin, is an area of land from which all water drains to a common waterway, such as a river, a lake or the ocean.

As rainwater and melting snow run downhill, they carry soil, pollutants and other materials from the land into our rivers, lakes and bays.

Watersheds are important because they provide drinking water and water for recreation, irrigation and industrial activities. They also provide food and water for plants and animals.

Watersheds consist of surface water – lakes, streams, reservoirs and wetlands – and all the underlying groundwater.

A watershed can be large or small. Some watersheds drain a few city blocks while others drain a large geographic area. The Mississippi River Basin drains 31 states before emptying into the Gulf of Mexico!

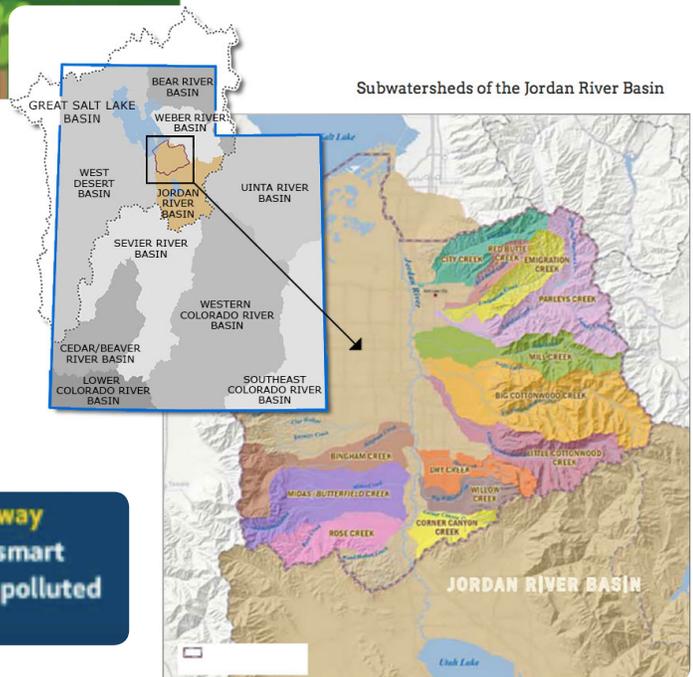
We all live downstream and our everyday activities can affect downstream waters.

A watershed is the area of land where all of the water that drains off of it goes into the same place—a river, stream or lake. Coastal watersheds drain to an ocean.

Salt Lake County is in the Jordan River Watershed. The elevation change as the water moves from the mountains to the valley along the Jordan River Watershed plays a role in water quality and conditions in Salt Lake County. Another major consideration is land use throughout the watershed.

To Do:

Find the area where your school is located on the Jordan River Watershed map. Is that location nearer the top, middle or bottom of the watershed? What activities do you participate in at home or at school that could have a negative impact on our watershed?



Check out EPA's How's My Waterway - watersgeo.epa.gov/mywaterway - to learn more about the condition of your local water body. Use a smart phone, tablet or computer to find out if your local stream or river is polluted and what's being done to help address the problems.

Um... It's time we talked about TMDL

It might mean Too Much Dirty Laundry or maybe Tell Me, Don't Lie!, but when it comes to water pollution, TMDL is short for **Total Maximum Daily Load**. TMDL is a calculation that the US Environmental Protection Agency (EPA) uses to describe the maximum amount of any specific pollutant that can be detected in a waterbody where the waterbody can still maintain its beneficial uses, such as drinking and bathing, supporting aquatic life, agricultural uses- livestock and irrigation, and recreation.

Some of the pollutants that cause waterways in Salt Lake County to be considered impaired or unsafe for people and animals include:

Nitrogen from fertilizer, pet waste, septic systems and waste water, leaves & grass clippings

Phosphorus from fertilizers, herbicides, waste water

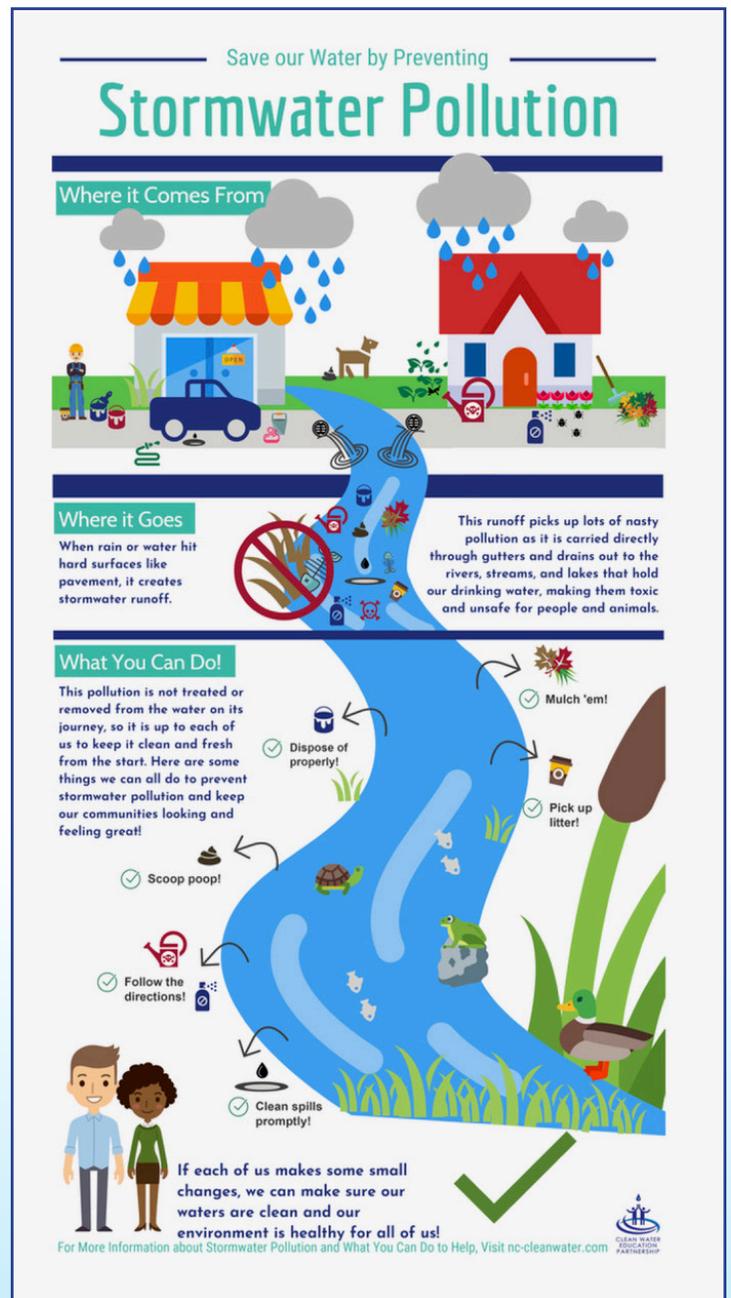
Metals from building materials, decaying asphalt, galvanized roofing, gutters, and fences

Fats, Oils, & Grease from cooking, automobiles, machines, and petroleum products

Pathogens from pet waste, wildlife, septic systems, and trash

Sediment from soil, erosion, and particulates in precipitation (Did you know that air pollution is also water pollution?)

Organic matter, such as leaves, grass clippings, plant material (plants and weeds), soil, and sand really adds to the problem.



Do you know about the water quality in your community?

The How's My Waterway Tool from EPA allows you to see the conditions of drinking water, swimming, eating fish, and aquatic life for the waterways near you.

To use the tool, visit: mywaterway.epa.gov

A
watershed

D
salinity

I
aquatic

L
ecosystem

C
bay

F
infiltration

J
turbidity

B
water quality

E
brackish

H
estuary

K
wetland

G
tributary

MATCH THE WORDS WITH THEIR DEFINITIONS

1.  The cloudiness of water
2.  Living in or growing on the water
3.  Process of water soaking into the ground
4.  A mixture of fresh and salt water
5.  An area of land that is permanently or seasonally saturated with water and contains vegetation that is adapted to its unique soil conditions
6.  Physical, chemical, and biological characteristics of water
7.  Rain that falls on this area all drains into the same body of water
8.  A community of living organisms and non-living elements interacting as a system
9.  The amount of dissolved salt in water or soil
10.  An inlet of water surrounded by land on three sides
11.  A stream or river that flows into a larger river, lake, or bay
12.  A partially enclosed body of water where fresh water from rivers and streams mixes with salt water from the ocean

Answers page 18

WATERSHED PUZZLER

STORMWATER POLLUTION

As rain falls from the sky,
it collects...



GUTTER RUNOFF

picks up leaves, sediment left behind
in gutters



LAWN RUNOFF

picks up soil, pet waste, fertilizer, trash



DRIVEWAY RUNOFF

picks up oil, gasoline, sediment, trash



ROAD RUNOFF

picks up oil, gasoline, sediment, trash, tar



STORM DRAIN

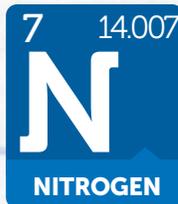
All water goes to a storm drain which leads to...



RIVER, LAKE OR OCEAN

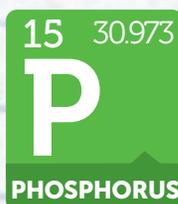
By the time the rain makes it to the ocean, it has
picked up pollutants from hundreds of sources.

The way we use our watershed's lands affects the health of the watershed and the ecosystems within it. With the development of our communities over time, we have hardened much of the watershed's lands with driveways, rooftops, sidewalks, parking lots, and other hard surfaces. When it rains or when the snow melts, water flows over these impermeable surfaces instead of being soaked into the ground. As the water travels it picks up dirt, trash, oil, grease, fertilizers, and other pollutants – all of which get washed into the storm drain system and then directly into our waterways. Once in our waterways, the nitrogen, phosphorus, sediment, and trash threaten the waterways' health.



Nitrogen is a chemical element (N) found in all of nature. When there is too much nitrogen in a waterway, it fuels the growth of algal blooms. Algal blooms are dense clusters of algae that block sunlight from other organisms. When an alga from the bloom dies, the decay process consumes dissolved oxygen in the water, which is needed by fish, blue crabs, and other organisms.

» *Sources of nitrogen include fertilizers, household septic systems, and municipal and industrial wastewater.*



Phosphorus is a chemical element (P). Like nitrogen, when there is too much phosphorus in a waterway, it fuels the growth of algal blooms.

» *Sources of phosphorus include fertilizers, herbicides, and wastewater.*



Stormwater, which may be carrying sediment from eroding land, picks up velocity as it travels over impervious surfaces. The speed of the water causes stream bank erosion, which deposits more sediment in the water. Too much sediment suspended in the water clouds the water (turbidity), harming fish, oysters, and aquatic grasses.

SLOW THE FLOW

Keeping pollutants off of the land is one way to help keep our waterways clean. Another way is to Slow the Flow of stormwater by using Low Impact

Development (LID) techniques. LID methods reduce the harm of stormwater by utilizing natural designs to keep stormwater on site. **See if you can match these simple, household Slow the Flow pictures with their descriptions.**

A



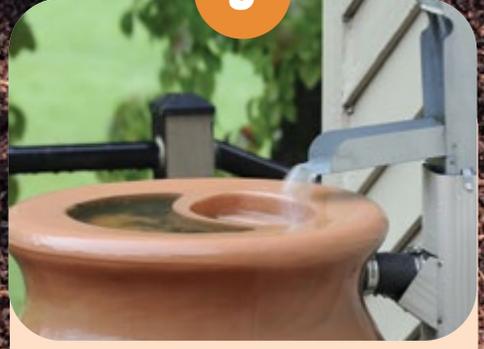
RAIN GARDEN

B



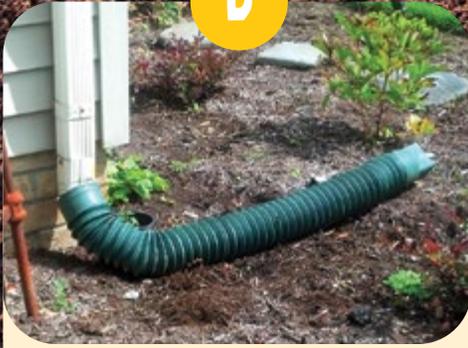
BUFFER GARDEN

C



RAIN BARREL

D



DIVERTER

E



CISTERN

Can you install any of these SLOW THE FLOW features at your home or school?

- 1 A small water catchment device that captures and stores rainwater for later use. These containers can hold 30 - 100 gallons, depending on the size of the container. This natural rain water can later be used to water gardens or for other yard activities. It is not potable water.
- 2 A depressed garden that has porous soils and specialized, water-loving plants. This type of garden holds stormwater and allows the water to infiltrate slowly into the ground instead of rushing into the stormwater system.
- 3 A flexible hose that attaches to guttering or a downspout to redirect stormwater to flow into gardens or landscaped areas instead of allowing water to move directly across a driveway or sidewalk.
- 4 A large scale water catchment device that can hold hundreds of gallons of rainwater which can be reused for flushing toilets and other non-potable household water uses, as well as watering large garden areas.
- 5 A naturally vegetated or planted area that separates a formal lawn area from a waterway. These can also be planted along curbed or ditched areas to slow stormwater before it enters the stormwater catch basin or pipe.

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Meet Your Local Water Provider

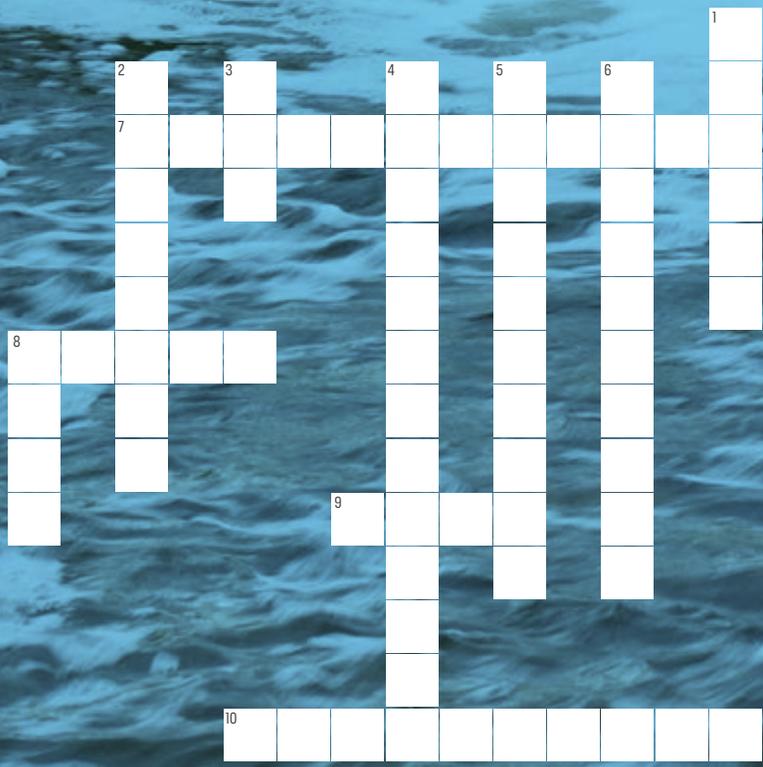
USE THE INTERNET TO FIND YOUR LOCAL WATER QUALITY REPORT TO LEARN ABOUT YOUR DRINKING WATER PROVIDER AND ANSWER THE FOLLOWING QUESTIONS:

- ❖ What is the name of your local drinking water provider?
- ❖ Do you get your water from this provider at home? At school?
- ❖ What role does a water utility play in providing for public health and safety?

- ❖ What is/are the source/sources of your drinking water? *(For example, surface water or groundwater; if surface water, give the name of the river, lake or stream.)*

- ❖ What is desalination?

- ❖ What is the treatment process used by your water utility and what chemicals do they use to make the water clean and safe to drink?



ACROSS

- 7 You can help stop water shortages from spreading by practicing _____.
- 8 A _____ toilet can waste up to 20 gallons of water per day.
- 9 To save water, plant flowers and shrubs in the spring or in the _____ when the watering requirements are lower.
- 10 Install one of these at your downspout to collect stormwater that can be used to water flowers and wash your car. (2 words)

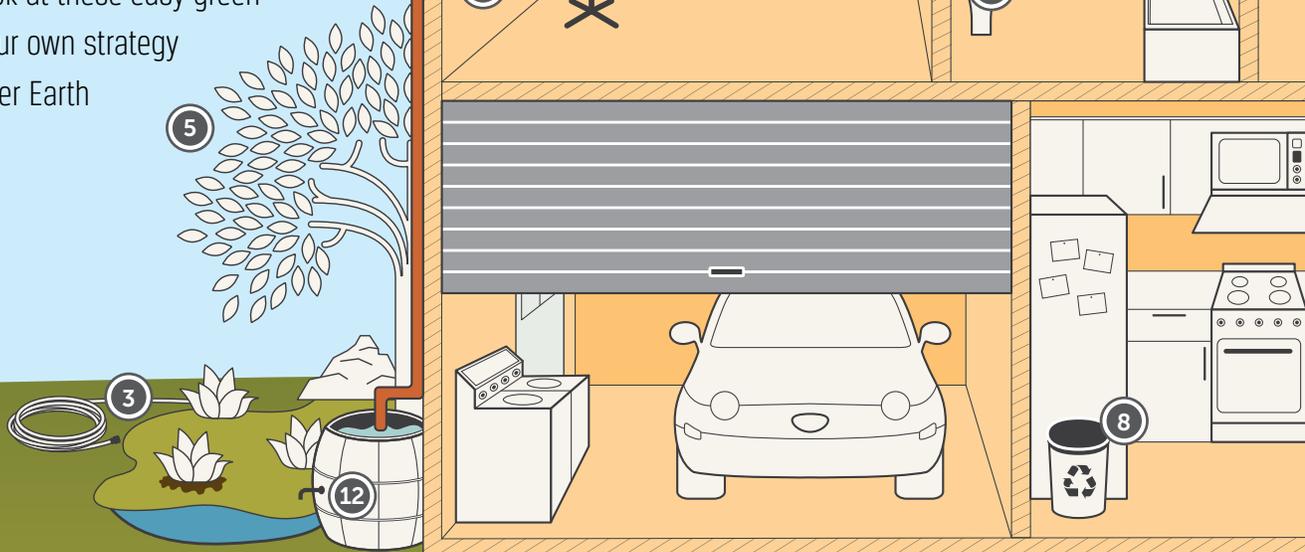
DOWN

- 1 Rain that falls on streets and carries pollutants such as fertilizers, oil, and bacteria into streams, rivers, and lakes is known as stormwater _____.
- 2 This type of precipitation is a result of atmospheric moisture mixing with sulfur and nitrogen oxides emitted from the burning of fossil fuels. (2 words)
- 3 Less than _____ percent of the Earth's water is drinkable.
- 4 Surface water (water in lakes, rivers, and streams) is naturally lost through evaporation and naturally replenished by _____.
- 5 The process by which water renews itself. (2 words)
- 6 This process removes undesirable particles from water during the treatment process.
- 8 These were hollowed out to make the first water pipes in the U.S.

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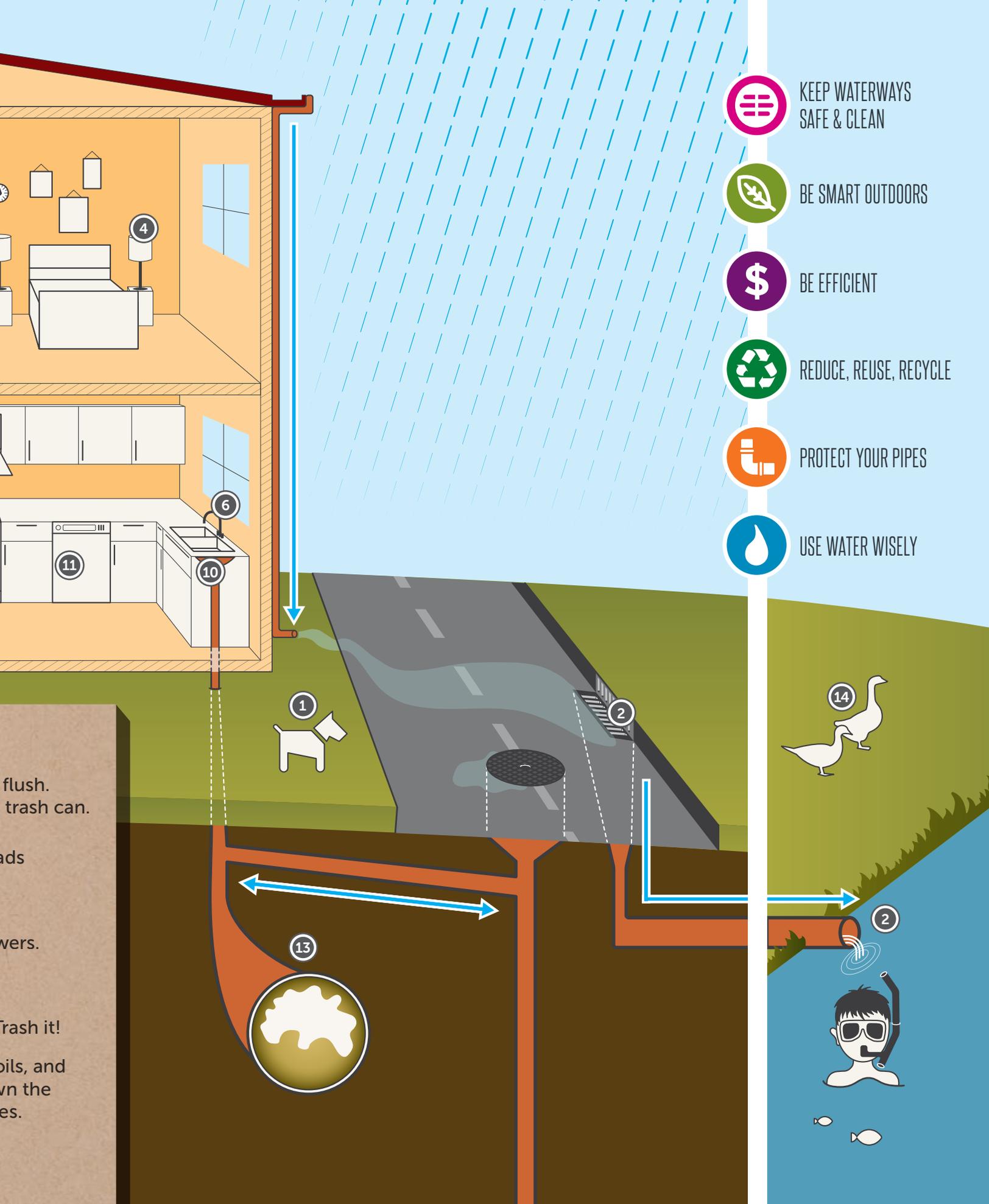
Green Living Starts Here

Sustainable living is neither time-consuming nor costly. There are simple steps you can take that are good for you, your home, your yard and your community. Take a look at these easy green tips, then map out your own strategy and get started. Mother Earth will thank you.



Fill the circles with the corresponding numbers in the diagram.

- | | | | | | |
|-----------------------|---|-----------------------|--|-----------------------|--|
| <input type="radio"/> | Turn off the faucet while brushing your teeth. | <input type="radio"/> | Switch to more efficient light bulbs. | <input type="radio"/> | Think before you flush. The toilet is not a trash can. |
| <input type="radio"/> | Only rain down the storm drain. | <input type="radio"/> | Unplug electronics when they are not in use. | <input type="radio"/> | Only wash full loads of dishes. |
| <input type="radio"/> | Reduce and recycle paper, junk mail, and telephone books. | <input type="radio"/> | Use a hose nozzle when watering your garden or washing your car. | <input type="radio"/> | Take shorter showers. |
| <input type="radio"/> | Recycle paper, plastic, glass and aluminum. | <input type="radio"/> | Drink tap water instead of bottled. | <input type="radio"/> | Pet Waste: Scoop it! Bag it! Flush it! |
| <input type="radio"/> | Catch the rain to water plants. | <input type="radio"/> | Don't feed ducks or geese. | <input type="radio"/> | Never pour fats, oils, or grease (FOG) down the drain, it clogs pipes. |
| <input type="radio"/> | Do not use the garbage disposal. | <input type="radio"/> | Choose native, drought-tolerant trees, shrubs, and plants. | | |



KEEP WATERWAYS SAFE & CLEAN



BE SMART OUTDOORS



BE EFFICIENT



REDUCE, REUSE, RECYCLE



PROTECT YOUR PIPES



USE WATER WISELY

flush.
trash can.

ads

wers.

trash it!

bills, and
own the
es.

DO THE MATH

HOW MUCH WATER DOES YOUR HOUSEHOLD USE?

This home water audit will give your family an idea of how much water your household uses daily. Your family will need to help you gather some of the answers for this audit. Answer only the questions that apply to your house.

HOUSEHOLD INFORMATION

- TYPE OF DWELLING**
- Detached single family residence
 - Town house residence
 - Condominium residence
 - Apartment residence

Does your dwelling have an individual water meter?
 Yes No

_____ Number of adults living in home
 _____ Number of children living in home

 _____ Number of toilets
 _____ Number of showers

 Dishwasher? Yes No
 Clothes washer? Yes No

WATER USE

- 1. SHOWERS:** How many showers does your family take a day? About how long is each one?
- 2. BATHS:** How many baths does your family take a day? A half-full tub is about 18 gallons, a full tub is about 36 gallons.
- 3. TOILETS:** How many times a day does your family flush the toilet? (The average is four flushes per person.)
- 4. TEETH:** Most family members brush their teeth at least twice a day for about two minutes each time. Leaving the faucet on while brushing your teeth wastes a lot of water. How often does you family brush?
- 5. HAND DISHWASHING:** How many times a day does your family wash dishes by hand? About how long does the water run each time?
- 6. DISHWASHER:** Answer this question only if you have a dishwasher. How many times a week does your family run the dishwasher?
- 7. LAUNDRY:** Answer only if you have a washing machine. How many loads of laundry does your family do each week?

_____	X	_____	=	
Number of showers		Number of minutes		Total shower time per day
_____	X	_____	=	
Number in family		Number of baths		Total of baths per day
_____	X	_____	=	
Number in family		Flushes per day		Total flushes per day
_____	X	_____	=	
Number in family		Number of brushes per day		Total number of brushes per day
_____	X	2 MINUTES EACH BRUSH	=	
Total number of brushes per day				Total minutes of brushes per day
_____	X	_____	=	
Washes per day		Minutes water runs		Total washing time per day
_____	÷	7 DAYS PER WEEK	=	
Uses per week				Average loads per day
_____	÷	7 DAYS PER WEEK	=	
Loads per week				Average loads per day



8. OTHER INDOOR WATER USES: Your family also uses water indoors in other ways. List some of these ways.

9. LAWN WATERING: How many times a week does your family water the lawn? About how many minutes do you water each time?

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \boxed{\hspace{2cm}}$$

Watering days per week Watering minutes per day Total minutes per week

$$\underline{\hspace{2cm}} \div 7 \text{ DAYS PER WEEK} = \boxed{\hspace{2cm}}$$

Total watering minutes per week Average watering time per day

10. OTHER OUTDOOR WATER USES: Your family may use water outdoors in other ways. List some of the ways.

FIGURE YOUR FAMILY'S TOTAL DAILY USE

Put your DO THE MATH answers in column C. Multiply columns B and C and put your answers in column D. This is the amount of water your family uses daily for each activity. Next, add column D to reveal the estimate of the total gallons of water your family uses daily.

A	B	C	D
Water Use Activity	Gallons per Minute or Use	Minutes or Uses per Day	Total Water Use Per Day
1. SHOWERS	5 gallons per minute	X	=
2. BATHS	36 gallons per use	X	=
3. TOILETS	5 gallons per flush	X	=
4. TEETH	3 gallons per minute	X	=
5. HAND DISHWASHING	3 gallons per minute	X	=
6. DISHWASHER	30 gallons per use	X	=
7. LAUNDRY	48 gallons per use	X	=
8. OTHER INDOOR USE	Put answer from above		=
9. LAWN WATERING	10 gallons per minute	X	=
10. OTHER OUTDOOR WATER USES	Put answer from above		=



TOTAL FAMILY USE PER DAY

GALLONS

MAKING THE RIGHT CHOICES

HOW MUCH WATER IS USED FOR EACH?

 = 1 GALLON DIRECT USE
the water you actually use

 = 1 GALLON VIRTUAL USE
the water that helped make the things you use

 = 100 GALLONS VIRTUAL USE



VS.

Shower 10 minutes
3.8 gallons/minutes

Low-flow shower 10 minutes
2.3 gallons/minute



VS.

Apple
18 gallons

Orange
13 gallons

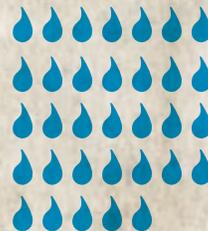


VS.

Soda 14 oz. bottle
33 gallons



Tap Water 16 oz. glass
.125 gallons

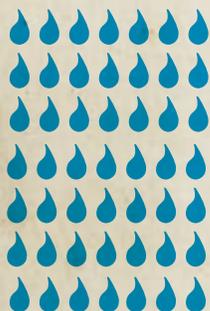


VS.



Bag of Chips
49 gallons

Slice of Bread
11 gallons

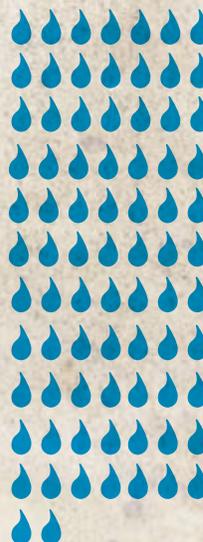
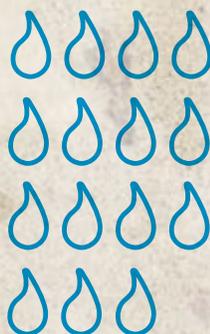


VS.



1 lb. of Beef
1,500 gallons

Cheese Pizza
79 gallons

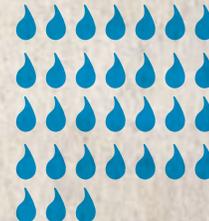
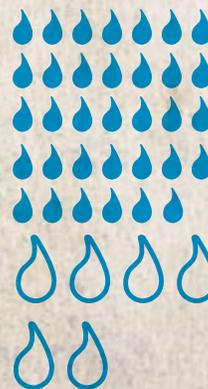


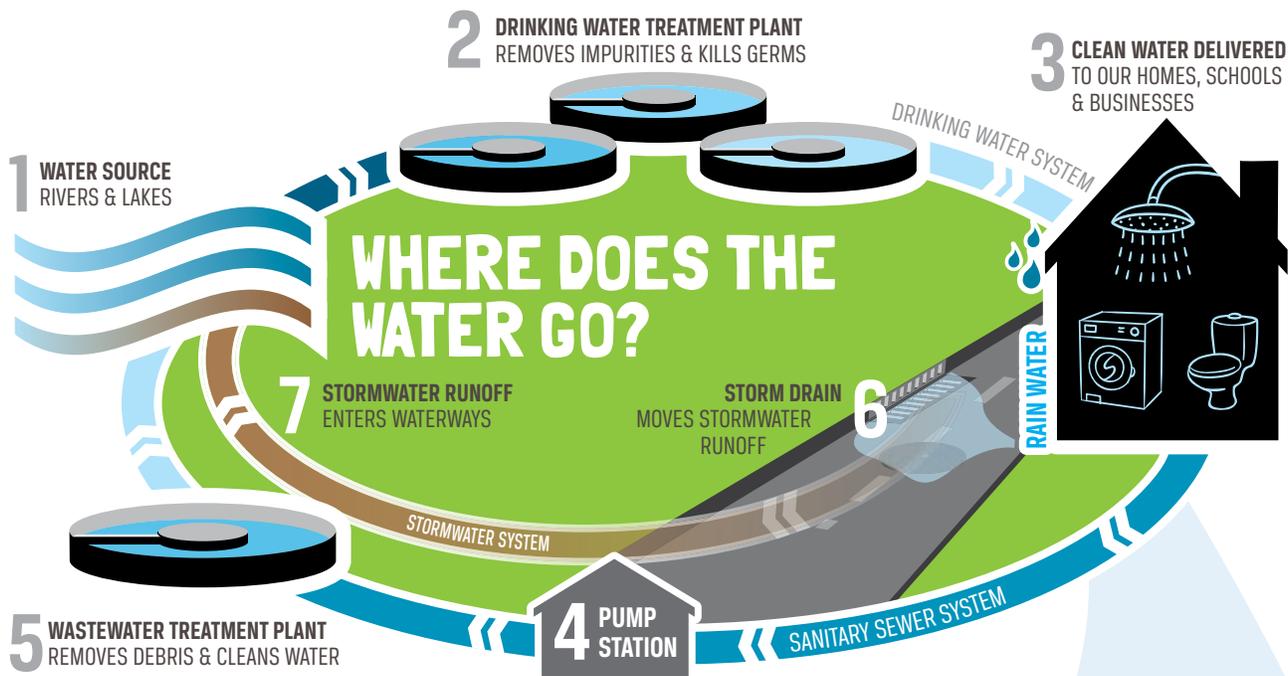
VS.



Hamburger
634 gallons

Salad
31 gallons





You've flushed a toilet, let the faucet flow and watched water rush down the street during a rainstorm. But do you really understand where the water goes? In Salt Lake City, there are three very important pipe systems that are part of our regional infrastructure. The drinking water system brings clean water to our homes, while the sanitary sewer system and the stormwater system are two separate systems that take water away from our homes and streets.

1 Most of the drinking water in Salt Lake County comes from mountain streams, Jordanelle and Deer Creek reservoirs and underground aquifers. **2** This surface water is pumped through huge pipes to a water treatment plant, where impurities are removed and germs are killed. Some people in our region use water that is pumped from deep underground. Unlike surface water, groundwater usually isn't treated to remove impurities, but it is disinfected to kill germs. **3** Once the water is clean and safe to drink, it is pumped through a network of pipes and storage facilities into our homes.

When water leaves our individual homes through sinks, showers, and toilets, it flows through a single small pipe which connects to a larger main pipe in the street. **4** The wastewater is carried through the sanitary sewer system by gravity to a pump station. **5** The pump station collects the wastewater and pushes it by force further down the pipes to the wastewater treatment plant. At the treatment plant, debris is removed and the water is cleaned before it is released back into our waterways.

6 Rainwater runoff from rooftops and gutters is directed to the stormwater system. The drain usually looks like a small opening in the curb or a grate in the pavement. **7** Unlike the sanitary sewer system, water that enters the stormwater system is never treated and flows directly to our local waterways. This is why it is so important not to litter. Cigarette butts, trash, dirt and grass clippings are all carried by the rain into the storm drain and out to rivers, lakes, or the ocean. This pollution is harmful to our waterways and local wildlife.

EACH SYSTEM HAS A SEPARATE AND SPECIFIC PURPOSE FROM THE OTHERS, AND IT IS IMPORTANT TO UNDERSTAND WHERE THE WATER GOES.

For the following questions, use the information to the left to explain how much water is used to make the items. Explain which requires more water. Then turn your explanation into a ratio.

Example: How much water is used to produce an apple versus an orange?

1 apple = 18 gallons of water & 1 orange = 13 gallons of water

It takes 18 gallons of water to produce an apple and 13 gallons of water to produce an orange. It takes more water to produce an apple than an orange. The ratio of water use is 18:13.

1 How much water is used to produce a hamburger and chips vs. a cheese pizza?

2 How much water is used to produce a 14 oz. bottle of soda vs. a 16 oz. glass of tap water?

3 Create your own question and test a classmate!

Fat-free Drains AS EASY AS 1, 2, 3



The sanitary sewer system and stormwater system are efficient ways to collect and contain two different types of water. Water in the sanitary sewer system is treated, while water in the stormwater system is not. However, sometimes a sanitary sewer overflow does occur, in which case untreated wastewater from the sanitary sewer system enters the stormwater system. These occurrences can be prevented, but it is important to understand the causes and consequences.



Grease is the most common cause of sanitary sewer overflows. When people cook and pour fats, oils, and grease (also known as FOG) down the drain, the FOG turns from a liquid to a solid as it cools, clogging the pipe. When the water can't make it past the greasy mess, the pipes back up. Sometimes it is so powerful it can push up a manhole and flow into the street. Once wastewater is on the street, it acts just like rainwater and flows to the storm drain.

Since stormwater never goes to a treatment plant, raw sewage from a sanitary sewer overflow can contaminate our waterways. Depending on the level of contamination, beaches may need to be closed to protect human health, or fish can die from ingesting the dirty water.

Here are three easy ways to keep your drains fat-free:

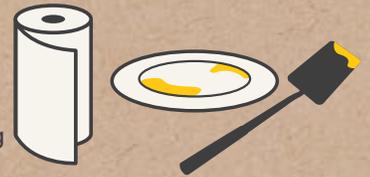
Can the Grease

1 Pour used cooking grease into an empty, heat-safe container, such as a soup can, and 2 store it in the freezer. Once solidified, 3 toss the can into the garbage.



Scrape the Plate

Wipe all pots, pans, dishes and cooking utensils with a paper towel prior to washing to absorb the grease.



Catch the Scraps

Eliminate using the garbage disposal. Catch food scraps in your sink with a basket or strainer and toss them into the trash.



Don't let your sanitary sewer system back up. Once it's in the stormwater system, it's too late!

Conservation Professionals

Meet **Daniel A. Baxter**, Business Recycling Coordinator, Public Works Resource Recovery Division

Tell us about your job.

My job involves promoting recycling, waste reduction, and resource management among local businesses; overseeing recycling and resource recovery programs for municipal buildings and schools; coordinating electronics recycling for municipal operations and schools; providing education and outreach to businesses and residents; and auditing the household hazardous waste, e-cycling, and recycling contractors with whom we work.

Why did you decide to go into this field?

I have been involved and interested in conservation since I was a child. After 20-plus years in the Navy, I returned to college and pursued degrees in environmental geology, oceanography, and land use management.

What do you enjoy most about your job?

I enjoy meeting new people and working with innovators to develop and evaluate new solutions to challenges.

What did you study in high school and college that helped prepare you for this line of work?

Math (especially applied statistics up to advanced trigonometry), science, geography, English, civics, and foreign languages.

What advice do you have for students about recycling?

Recycling is a multifaceted discipline. It is constantly changing to meet new challenges. So, I'd advise you to be willing to learn and work with others to develop new innovations in recycling that will make a difference.



RESOURCE MANAGEMENT MATTERS

Every day people make hundreds of choices regarding resource use: ride in a car or ride a bike; recycle or throw away your soda can; turn off the water or leave it running while you brush your teeth.

All of these decisions have costs and benefits. Renewable resources such as air, water, and trees are able to replenish themselves over time, yet it is important to balance their use with how quickly the resources can be replenished.

Nonrenewable resources such as coal, oil, natural gas, and nuclear power cannot be reproduced. When these are gone, the resources are gone for good.

TEST YOUR RECYCLING IQ

1. A soda can that is recycled today could be back in your house as a new can in just two months.
True or False
2. Aluminum can be recycled up to four times.
True or False
3. The average American generates four pounds of trash a day.
True or False
4. Glass can be recycled forever.
True or False
5. It takes 50 years for aluminum cans to decompose in a landfill.
True or False
6. Plastic bags and product wraps can be recycled at most grocery stores.
True or False
7. Electronics can be placed in your household recycling bin.
True or False
8. Recycling conserves resources and saves energy.
True or False

Answers page 18

TO RECYCLE, OR NOT TO RECYCLE?



Recycling plays an important role in responsible resource management.

Pitch in to make a difference by knowing what's recyclable (and what's not) in your community.

FOR THE RECYCLING BIN

- **Empty metal cans (steel, tin, aluminum cans)**
- **Empty plastic bottles & jugs with a neck or spout (beverages, non-toxic cleaning products)**
- **Paper products (printer paper, newspaper, magazines, cardboard rolls, flattened cardboard boxes)**



FOR SPECIAL COLLECTIONS

- **Plastic bags** – Return for recycling at participating grocery and retail stores. Visit abagslife.com to find a store near you.
- **Compact fluorescent light bulbs** – Return to a household hazardous waste event or facility. askHRgreen.org/household-hazardous-waste
- **Electronics** – Recycle at electronic recycling events. askhrgreen.org/electronics-recycling-donating
- **Rechargeable batteries** – Accepted at household hazardous waste events. askHRgreen.org/battery-disposal



CLIP AND SAVE!

ANSWER GUIDE

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1. J
2. I
3. F
4. E
5. K
6. B
7. A
8. L
9. D
10. C
11. G
12. H

page 6

1. C
2. A
3. D
4. E
5. B

page 7

1. NP
2. NP
3. NP
4. P
5. NP
6. NP
7. P
8. NP
9. NP
10. NP
11. NP
12. NP
13. NP
14. NP

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1. It takes 683 gallons of water to produce a hamburger and chips and 79 gallons of water to produce a cheese pizza. It takes more water to produce a hamburger and chips than it does to produce a cheese pizza. *The ratio of water use is 683:79. The ratio of water use is 683/79. The ratio of water use is 683 to 79.*
2. It takes 33 gallons of water to produce a 14 oz. bottle of soda and .125 gallons of water to produce a 16 oz. glass of tap water. It takes more water to produce a 14 oz. bottle of soda than it does to produce a 16 oz. glass of tap water. *The ratio of water use is 264:1. The ratio of water use is 264/1. The ratio of water use is 264 to 1.*

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1. True
2. False (Forever)
3. True
4. True
5. False (100 years)
6. True
7. False (take to special electronics collection)
8. True

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- | | | |
|----|----|----|
| 16 | 4 | 15 |
| 2 | 7 | 11 |
| 9 | 3 | 17 |
| 8 | 6 | 1 |
| 12 | 14 | 13 |
| 10 | 5 | |



GLOSSARY

Acid rain: Rain or any other form of precipitation that is unusually acidic due to emissions of sulfur dioxide and nitrogen oxides.

Algal Bloom: A dense cluster of algae often caused by excess nitrogen and phosphorus. As it grows it blocks sunlight from reaching organisms that live beneath it and it consumes dissolved oxygen that is needed by fish and crabs.

Aquatic: Living or growing in water.

Aquifer: An underground body of porous rock, sand or gravel through which water can easily move.

Bay: An inlet of water surrounded by land on three sides.

Brackish: A mixture of fresh and salt water.

Desalination: The process of removing salt from water so it can be used for drinking or irrigation.

Ecosystem: A community of living organisms and non-living elements interacting as a system.

Estuary: A partially enclosed body of water where fresh water from rivers and streams mixes with salt water from the ocean.

Herbicide: A substance for killing plants, especially weeds.

Impermeable: Not able to let water or liquid pass through.

Impervious: Not able to let anything through.

Infiltration: The process of water soaking into the ground.

Infrastructure: The system of public works such as roads, drinking water pipes, stormwater ditches, ponds and pipes, and wastewater pipes.

Municipal: Referring to a town, city or its local government.

Porous: Able to let water or liquid pass through.

Potable: Fit to drink; drinkable.

Revenue: The income of a government from taxation, user fees, customs, or other sources.

Runoff: The water that flows off from the land and into a waterway.

Salinity: The amount of dissolved salt in water or soil.

Septic system: A small scale treatment system that collects and treats wastewater. These systems require periodic pumping and maintenance.

Tributary: A stream or river that flows into a larger river, lake, or bay.

Turbidity: The cloudiness of water.

Velocity: The rate of speed with which something happens.

Wastewater: Water that has been used in washing, flushing, or manufacturing.

Watershed: Rain that falls on this area all drains into the same body of water.

Water main: A principal pipe that distributes drinking water.

Water quality: The physical, chemical, and biological characteristics of water.

Wetland: An area of land that is permanently or seasonally saturated with water and contains vegetation that is adapted to its unique soil conditions.



Salt Lake County Stormwater Coalition Website
<https://stormwatercoalition.org>



We All Live Downstream:
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