



**BE A
WATER
HERO**

How You Can Protect Our
ONE WATER, ONE FUTURE



Hi Kids! I'm your Water Hero, JoJo!

Our water is thousands of years old and is the same water the dinosaurs used. Did you know that only 1% of our water is safe to drink? Water heroes like me work hard to protect our **ONE WATER, ONE FUTURE** so there is enough for everyone today and tomorrow.

This activity book will teach you how to be a water hero like my friends at **Little Rock Water Reclamation Authority (LRWRA)**. They protect our water, public health and the environment by reclaiming and cleaning our used water. Now it's your turn to help keep our water safe!

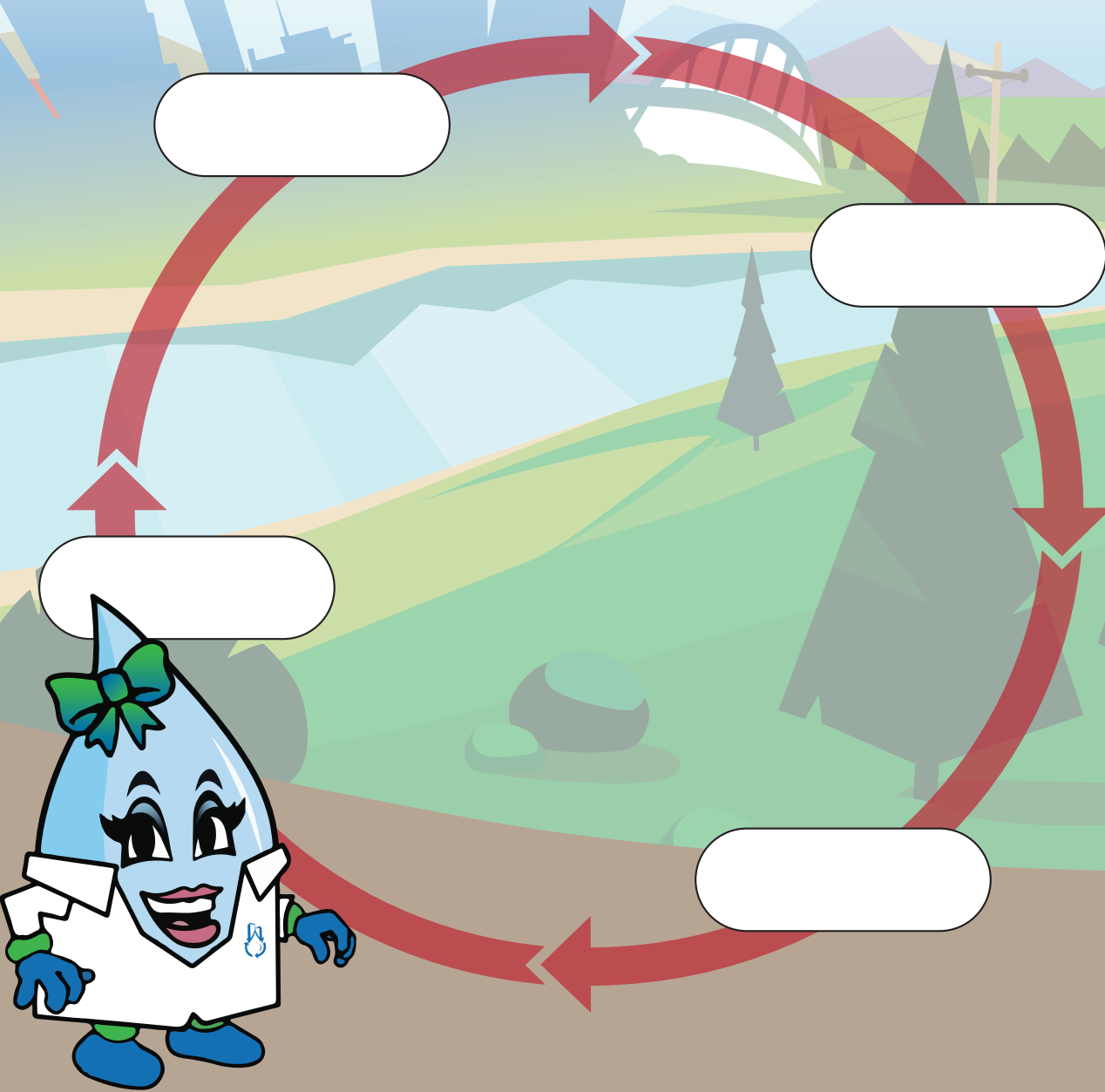
Grab your cape and let's start your journey to becoming a water hero!



The Water Cycle

Our water is heated up by the sun and is turned into a gas called vapor that rises into the sky. This stage is called **EVAPORATION**. The next stage is called **CONDENSATION**, where water vapor rises into the sky and turn into clouds. When too much water is collected in the clouds, **PRECIPITATION** begins and water falls down on the earth as rain! As rain falls down, it soaks into the ground and flows into the lakes, rivers and oceans. This stage is called **COLLECTION**.

Here are the stages of the water cycle:
Identify each stage in the process by filling in the spaces.



Reclaiming Our Used Water

As a water hero, it's important that you know how our friends at Little Rock Water Reclamation Authority clean the dirty water that leaves your home by going down the drain. When used water goes down the drain, it flows underground through more than 1,400 miles of pipes, which is like 24,640 football fields, to one of LRWRA's reclamation facilities. This is where water is reclaimed and cleaned with natural processes and is put back into the environment cleaner than what is already there!

Follow the water through the drains and back to the river!



Find the Water Words

It's important to have clean water. The safety and health of the environment and all living things depend on it. Little Rock Water Reclamation Authority works hard every day to protect Little Rock's sewer pipeline system so we have quality water for future generations like you!

Find the words below that explain what it takes to keep water safe for everyone!



F I L T E R X Y S N
S I S E P I P A N E
K R B J O S F G V I
O N P W Z E K N A T
J R E T A W X U H Q
P P O L L U T I O N
T N E M T A E R T L
I P L G G M A V Z L
D D I E L A K E N E
I M A E R T S T K W

STREAM

FILTER

PIPES

SAFE

WATER

WELL

TREATMENT

TANK

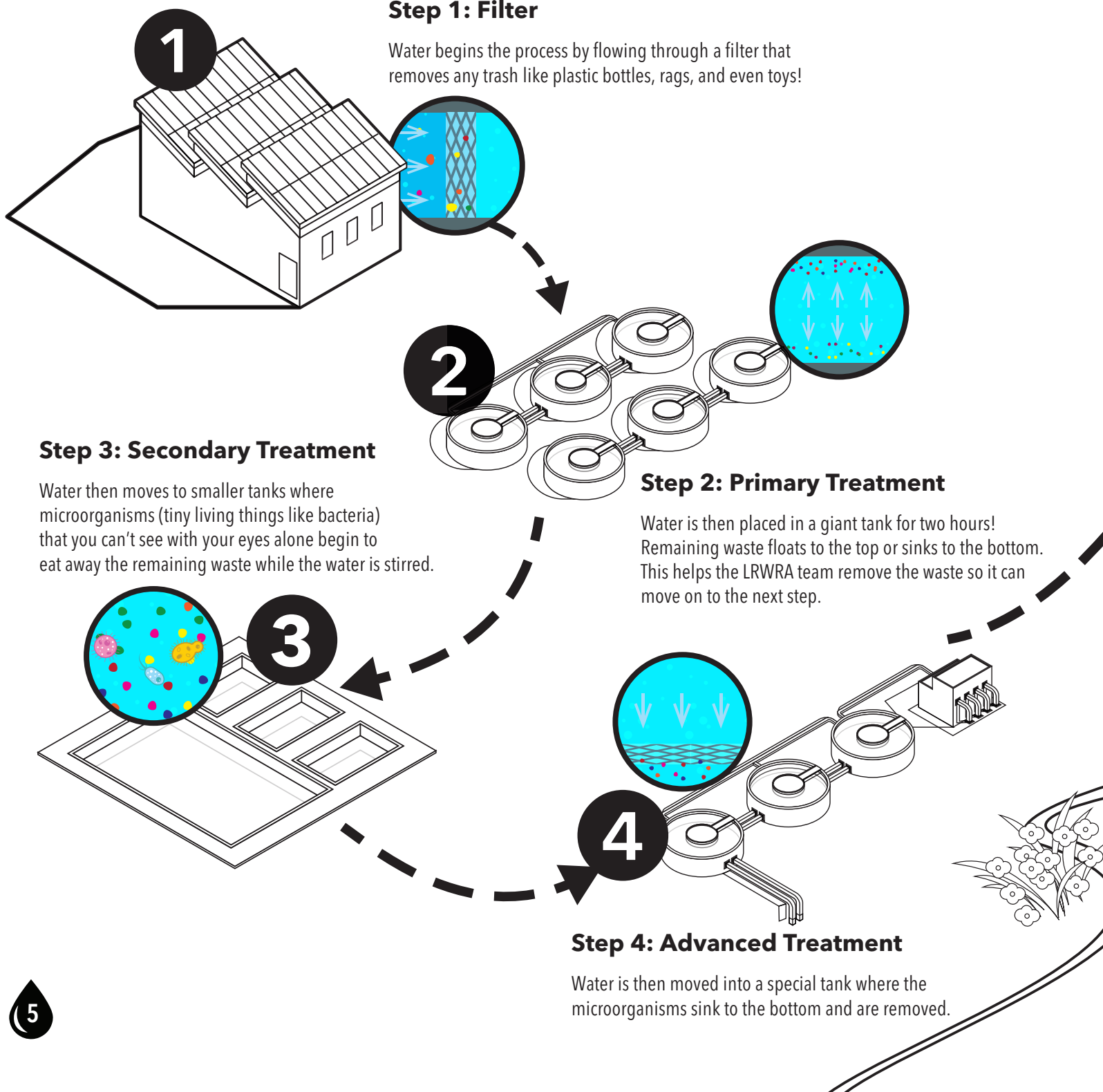
POLLUTION

LAKE

Six Steps to Clean Water

Our water heroes at LRWRA work hard to make sure that the water we borrow and use goes back to the environment clean. They use a six-step process to reclaim our ONE WATER and put it back into the environment - cleaner than what is already there!

Check out LRWRA's six steps to clean water and color the water treatment process!

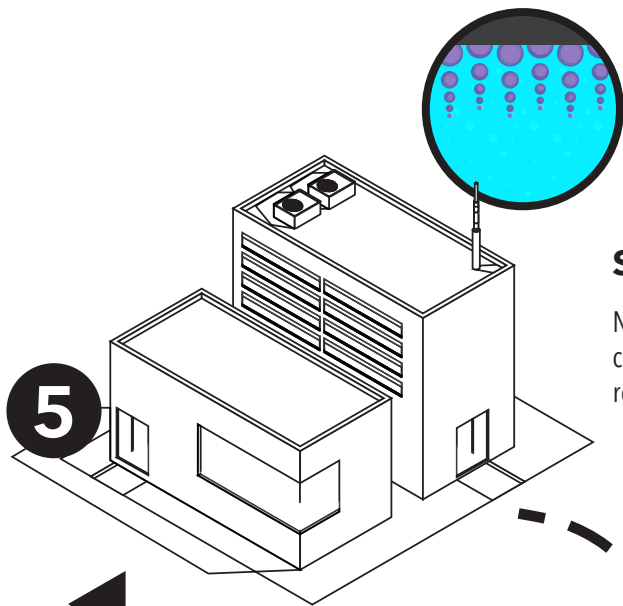


Water heroes need to know how to clean our ONE water. Follow LRWRA's six steps to clean water and see how our ONE WATER is cleaned.



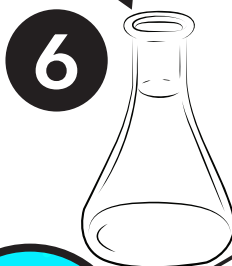
Step 5: Disinfection

Next, the water is treated with a special light called an ultra violet light which removes any remaining microorganisms like bacteria.



Step 6: Testing

The last step is to test the water and make sure the water is clean. Once LRWRA is 100% sure the water is clean, it is returned to the Arkansas River cleaner than what is already there!



Hey Kids, Don't Flush That!

There are some things that should never be flushed or put down the drains. You can help Little Rock Water Reclamation Authority protect the environment and public health! Tell your friends to only flush the 3Ps: Pee, Poop and Toilet Paper.

Find and circle the hidden items below that should NEVER go down the drain.



Candy



Diaper



Hair



Wipe



Floss



Towel



Bow



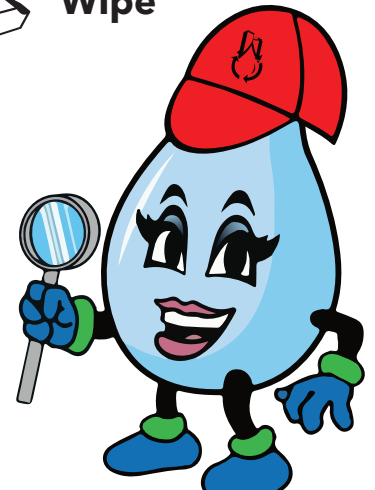
Toy



Paper Towel



Medicine



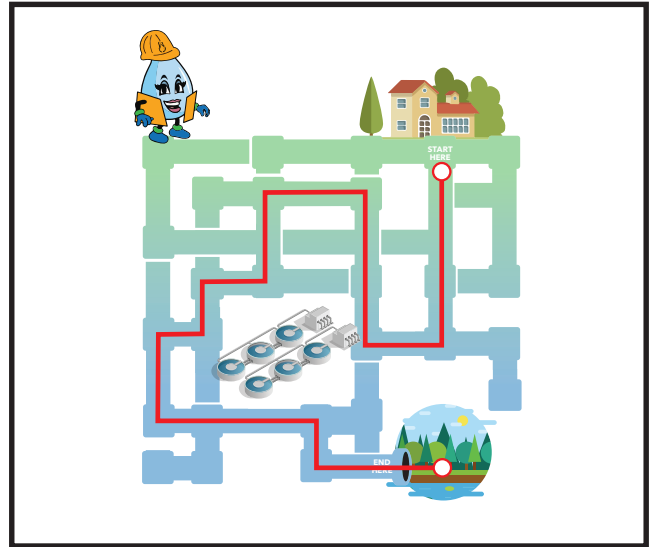
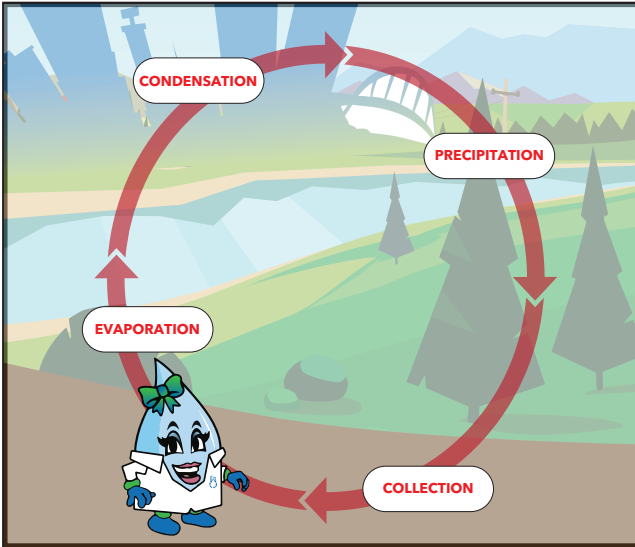
We Have A Water Story For You

You've learned a lot about what it takes to be a Water Hero, and how important it is to protect the **ONE WATER** we all share. Now, unscramble the words to complete your water story. Once you've completed the water story, you'll be a Water Hero just like me!

- 1 Only one percent of the earth's water is _____ (**EAFS**) to drink.
- 2 Each of us have a responsibility to help save and clean _____ (**TERAW**) everywhere.
- 3 The water _____ (**YCCEL**) allows us to use the same water that was here thousands of years ago.
- 4 When the sun provides heat, water from oceans, puddles, streams, rivers and lakes turns into vapor. This is called _____ (**VPOTINOARAE**).
- 5 _____ (**TCIPRPETIIONA**) is when water falls as rain into lakes, oceans, rivers and streams.
- 6 Little Rock Water Reclamation Authority works hard to make sure that the water we borrow is reclaimed and put back into the environment with their _____ (**IXS ETSPS**) to clean water.
- 7 Unflushables cause damage to the _____ (**IPPSE**) and clog our _____ (**WSREE**) system.
- 8 Helping keep water safe and clean protects the environment and makes us all water _____ (**ERHOSE**).



Answer Key



WATER STORY SCRAMBLE

1. safe
2. water
3. cycle
4. evaporation
5. precipitation
6. six steps
7. pipes, sewer
8. heroes

Congratulations!

You are now a Water Hero who can help Little Rock Water Reclamation Authority protect our **ONE WATER, ONE FUTURE!**



At LRWRA we:

TREAT 32 million gallons of used water a day, and about 11.7 billion gallons of used water a year

CLEAN almost 1.4 million feet (300 miles) of sewer pipes

INSPECT almost 5.6 million feet (1,000 miles) of line a year

Water facts:

71%

of the Earth's surface is covered with water

97.5%

of Earth's water is salty or undrinkable

2.5%

of Earth's water is freshwater - locked up in ice & glaciers

How much water is used:



1 gal
to brush teeth



27 gal
for a shower

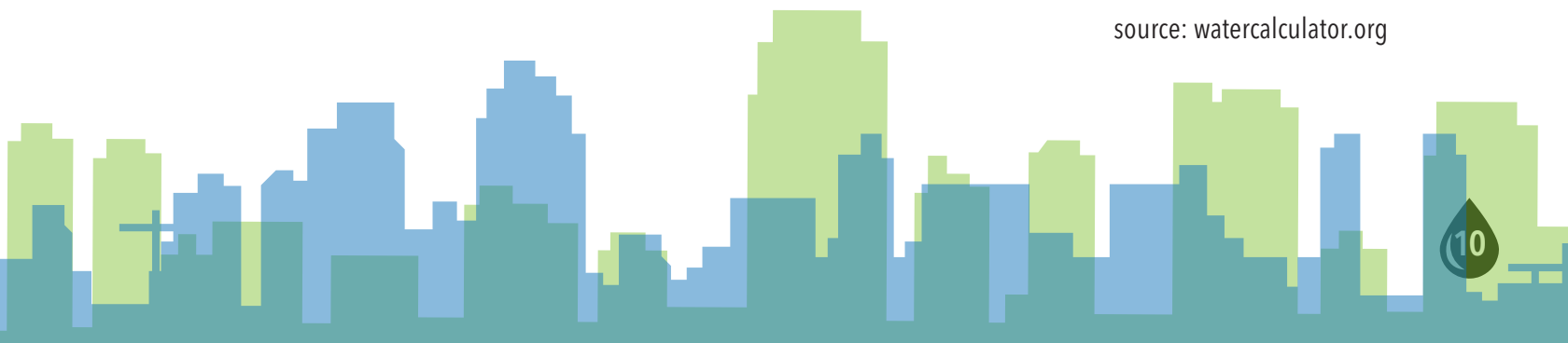


650 gal
to make one cotton t-shirt



3,190 gal
to make a smartphone

source: watercalculator.org





LITTLE ROCK
**Water Reclamation
Authority** ONE WATER.
ONE FUTURE.

Little Rock Water Reclamation Authority offers families and businesses learning tools to help them make good decisions about water, water usage and water reclamation. You can also request speakers and tours of our facilities.

To learn more about our process, visit us at lrwra.com/learning-center.