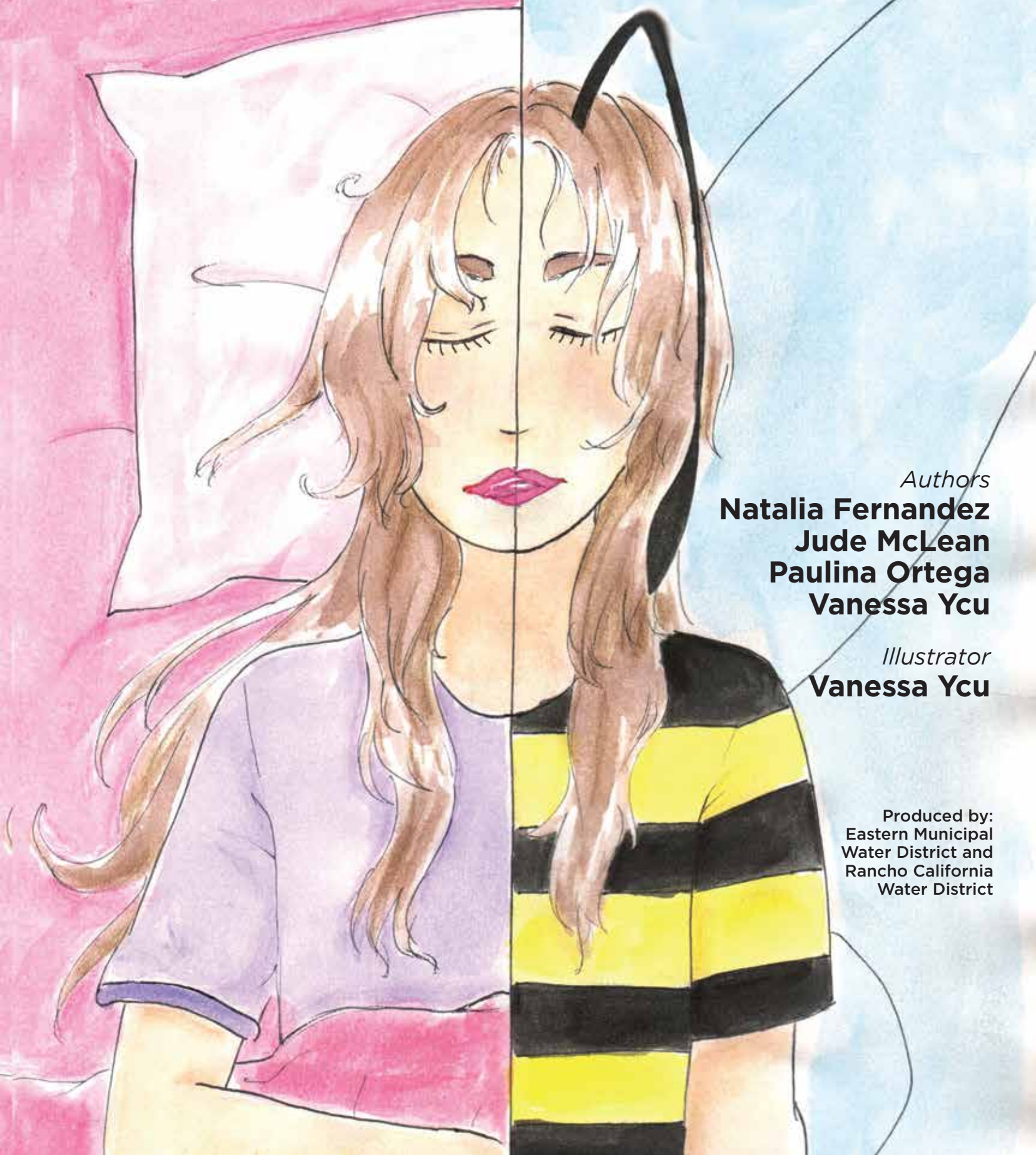


# "Bee"yond the Water-Wise Garden



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Produced by:  
Eastern Municipal  
Water District and  
Rancho California  
Water District





We dedicate this book to  
EMWD and all the bees in the world.  
—Jude, Natalia, Paulina, and Vanessa





It was a sunny day. The birds were chirping, the bees were buzzing, and, for Alice, this was a problem.

Alice did not like bees ever since one stung her during the hula-hoop contest in second grade. She was about to win when a bee flew by her. She swatted the bee, and it stung her. She ended-up losing the contest, and that made her sad. Now, Alice thinks bees are mean and useless insects that ruin people's lives.





Alice was outside in the backyard with her little brother Jimmy. She was squirting the hose to spray the bees. Her dad walked outside and asked, "Alice, what are you doing?"

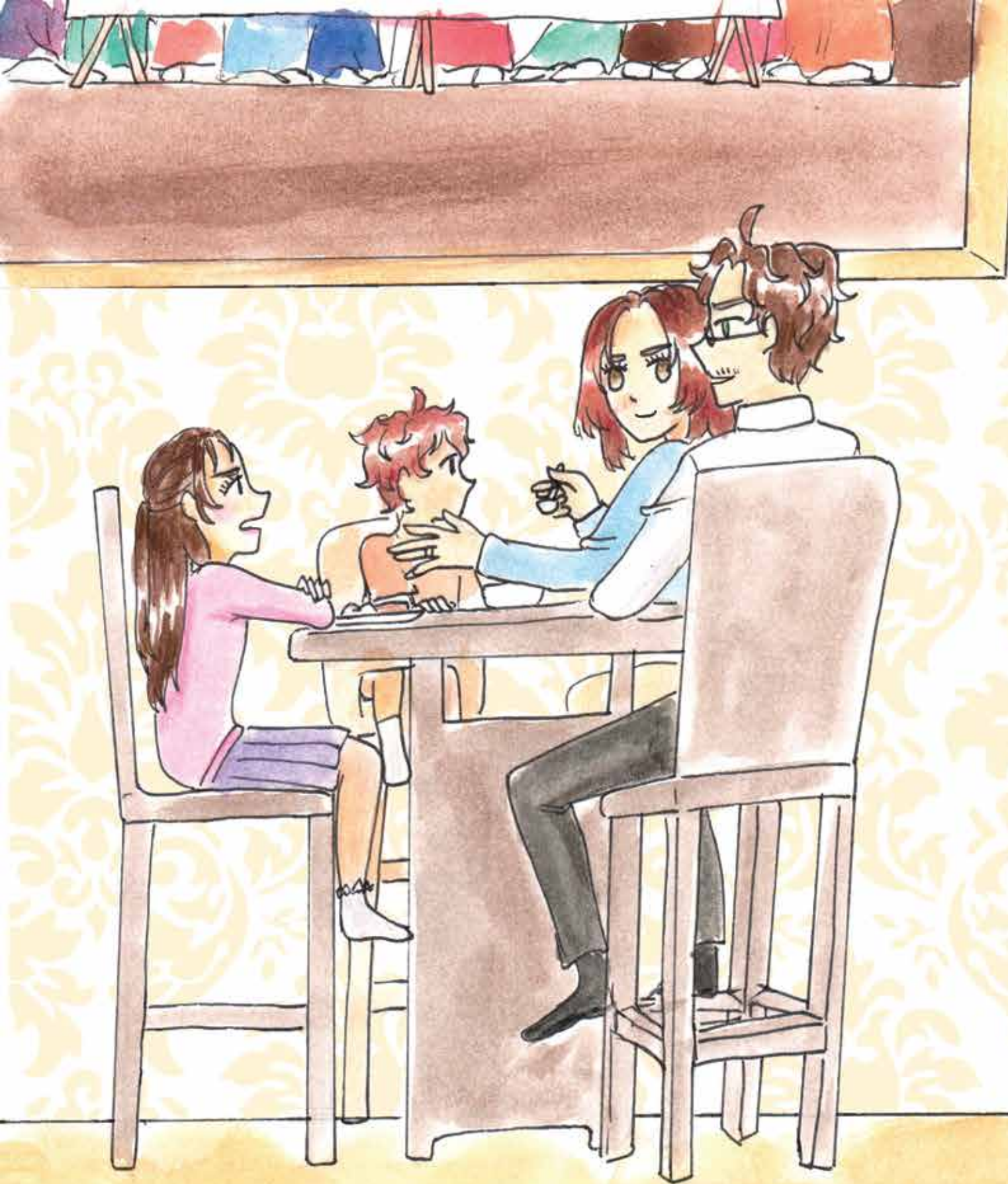
"I am trying to get rid of the evil bees with the water hose," she responded.

"Alice, don't do that!" her dad said. "Bees are important to us because they pollinate our crops, which provides us with food. Plus you're wasting water."

"There's more water in the fridge if we need it," Alice argued. "Plus bees are impolite."

Alice's dad shook his head and said, "Oh Alice, that is silly. Please come inside for dinner."





Alice sat down at the dinner table, and Alice's dad put Jimmy in his high chair. When the family was seated at the table, Alice's dad brought up what Alice had done. "Alice, bees are important for farming crops that we eat."

Alice responded by turning to her mom and saying, "Mom, dad does not understand. I was so close to winning the hula-hoop contest, and then that small honeybee came and ruined my life!"

Alice's mom said, "You may not like the bees, Alice, but we need them. They are the reason we have food on our table. You also should not waste water trying to harm them. Water is important and so are bees."



Alice wasn't convinced. Even after the talk, she still didn't like bees, and she had no good reason to care about saving water. After dinner, Alice went to her room to do her homework and then climbed into bed.

As Alice was closing her eyes, she thought about what her parents had said. It didn't take long for Alice to fall asleep.





Suddenly, Alice awoke to the sound of bees. She looked around and saw she was surrounded by thousands of bees. She started to freak-out, and it took her a few long breaths to calm down. After she calmed down, she looked at her clothes and saw they had black and yellow stripes. Alice looked over her shoulder and saw she had wings. She touched the wall and felt something sticky. She tried it, and it tasted sweet.

“Where am I?” Alice wondered.

Suddenly a bee bumped into her. “Sorry, I’m in a rush,” said the busy bee. Alice, still confused about what was happening, said, “It’s okay, I guess?”

“I’m Beatrice,” said the busy bee. “What’s your name?”

“I’m Alice. But, where am I? And why do I have wings on my back?”

“You’re a bee, silly,” said Beatrice.







Alice now felt even more confused.

“Come on, let’s go collect pollen,” Beatrice said. Alice followed her as they buzzed over to a water-wise garden.

When Alice entered the garden she saw something incredible. The flowers and trees were huge. She could land on a leaf and lay on it like it was a bed. Plants were being watered with small amounts of water, and Alice noticed it was very unlike the way she watered her plants at home.

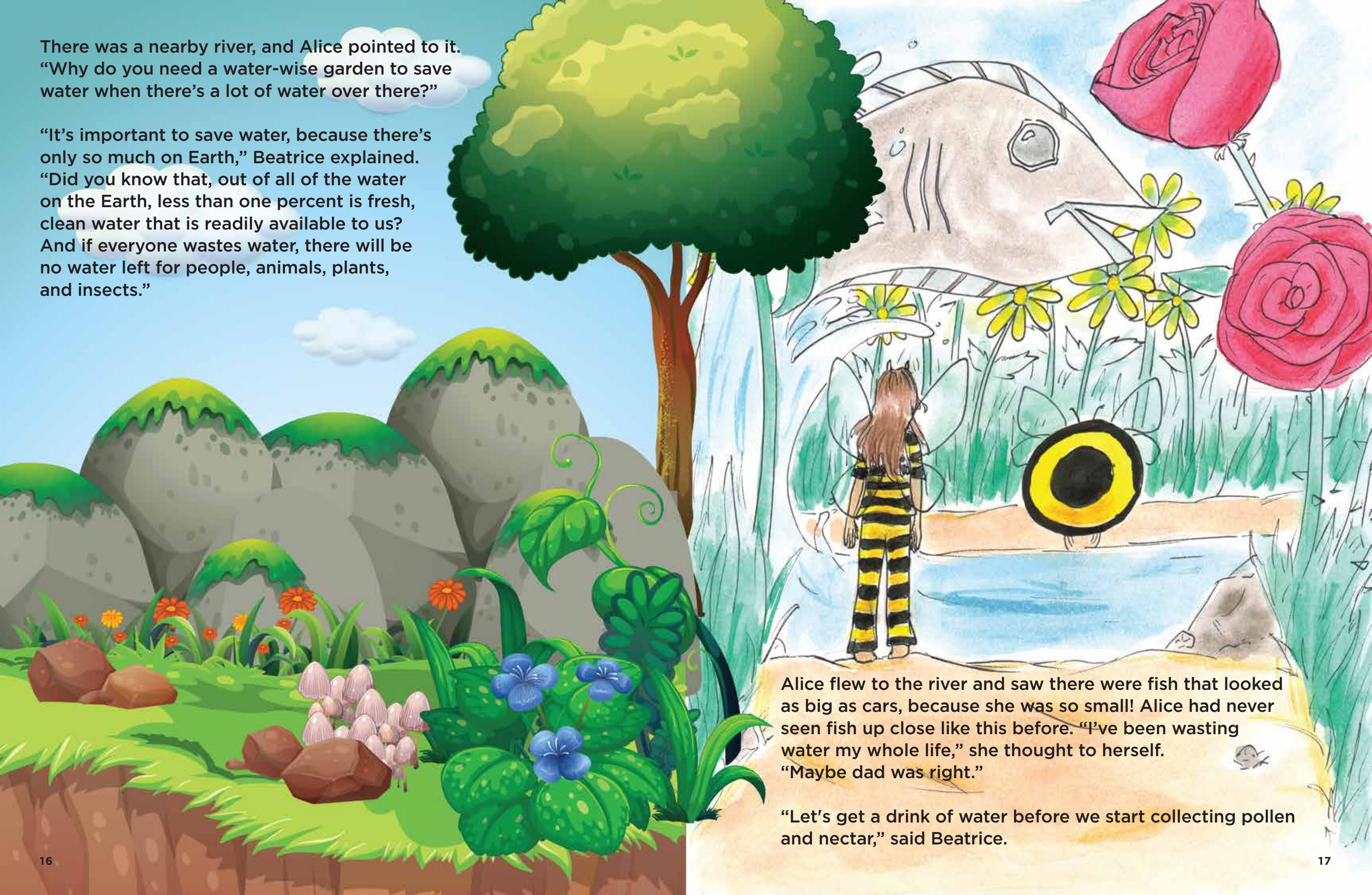
“What is this place?” asked Alice.

“It’s a water-wise garden that saves water,” said Beatrice.



There was a nearby river, and Alice pointed to it. "Why do you need a water-wise garden to save water when there's a lot of water over there?"

"It's important to save water, because there's only so much on Earth," Beatrice explained. "Did you know that, out of all of the water on the Earth, less than one percent is fresh, clean water that is readily available to us? And if everyone wastes water, there will be no water left for people, animals, plants, and insects."



Alice flew to the river and saw there were fish that looked as big as cars, because she was so small! Alice had never seen fish up close like this before. "I've been wasting water my whole life," she thought to herself. "Maybe dad was right."

"Let's get a drink of water before we start collecting pollen and nectar," said Beatrice.





They flew over to a flower. When Alice landed on the flower, she could see it up close for the first time. “Why do bees collect pollen and nectar?” asked Alice.

“Wow, you must be one clueless bee,” buzzed Beatrice. “We collect pollen and nectar to feed our hive, and make honey. When we do this, we are also pollinating the plants. We also collect water to take to our hive, as needed.”

“What happens if plants aren’t pollinated?” Alice asked.

“Well, plants wouldn’t be able to produce fruit and vegetables which means the food won’t grow,” Beatrice responded. “Here’s something to think about Alice: Do you know humans love pizza?”

“Of course I do!” Alice shouted with excitement. After all, she was a human (even though Beatrice thought she was a bee).

Beatrice laughed and said, “Well here is the thing, Alice, no bees means no pizza.”

“What do you mean?” questioned Alice worriedly.

“Well, if we bees are not around to pollinate the tomato plants, there will be no tomatoes for pizza sauce. Therefore, no bees, no pizza,” Beatrice said.

Alice remembered what her parents had said about bees and why they were important. This information about pizza confirmed it.





Alice looked over her shoulder and saw what looked like a giant walking through the garden. She got scared and hid behind a flower petal. She realized it was a person and not a giant. He looked large because she was so small now. "Who is that?" Alice asked.

"That is the beekeeper," said Beatrice. "He takes care of bees."

"Really? The bees don't frighten him?" Alice wondered, but then she remembered something, "Hey! Speaking of people, why do bees sting people? It's very rude."

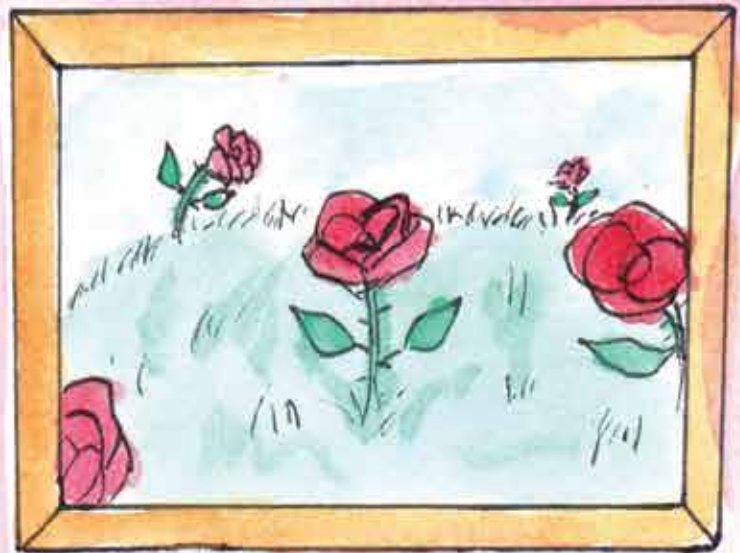
"Bees only sting when they feel like someone or something is trying to hurt them," said Beatrice. "I was in someone's backyard earlier today when a little girl tried to harm me with a water hose. It wasn't very nice because all I wanted to do was collect pollen and nectar and get a drink of water," she continued.

Alice realized she was the one who had squirted the water hose at the bees in her backyard. She felt guilty for trying to harm the bees when all they were trying to do was collect pollen and nectar. Beatrice was actually a really nice bee...and pretty smart too.

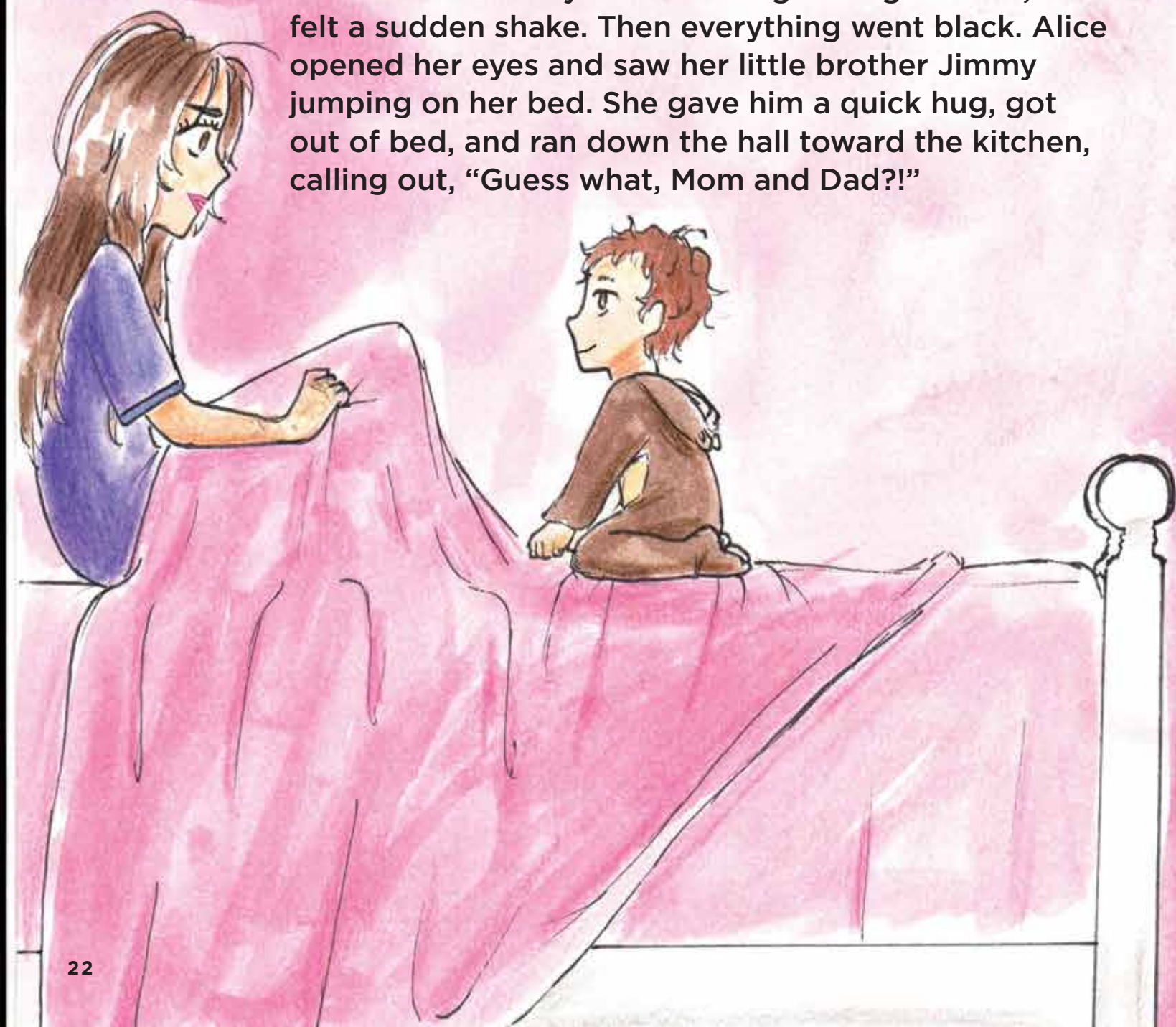
"You're right, Beatrice," said Alice. "That was not very nice at all."







After they were done collecting the water, the pollen and the nectar, Alice and Beatrice made their way back to the hive. As they were buzzing through the air, Alice felt a sudden shake. Then everything went black. Alice opened her eyes and saw her little brother Jimmy jumping on her bed. She gave him a quick hug, got out of bed, and ran down the hall toward the kitchen, calling out, "Guess what, Mom and Dad?!"

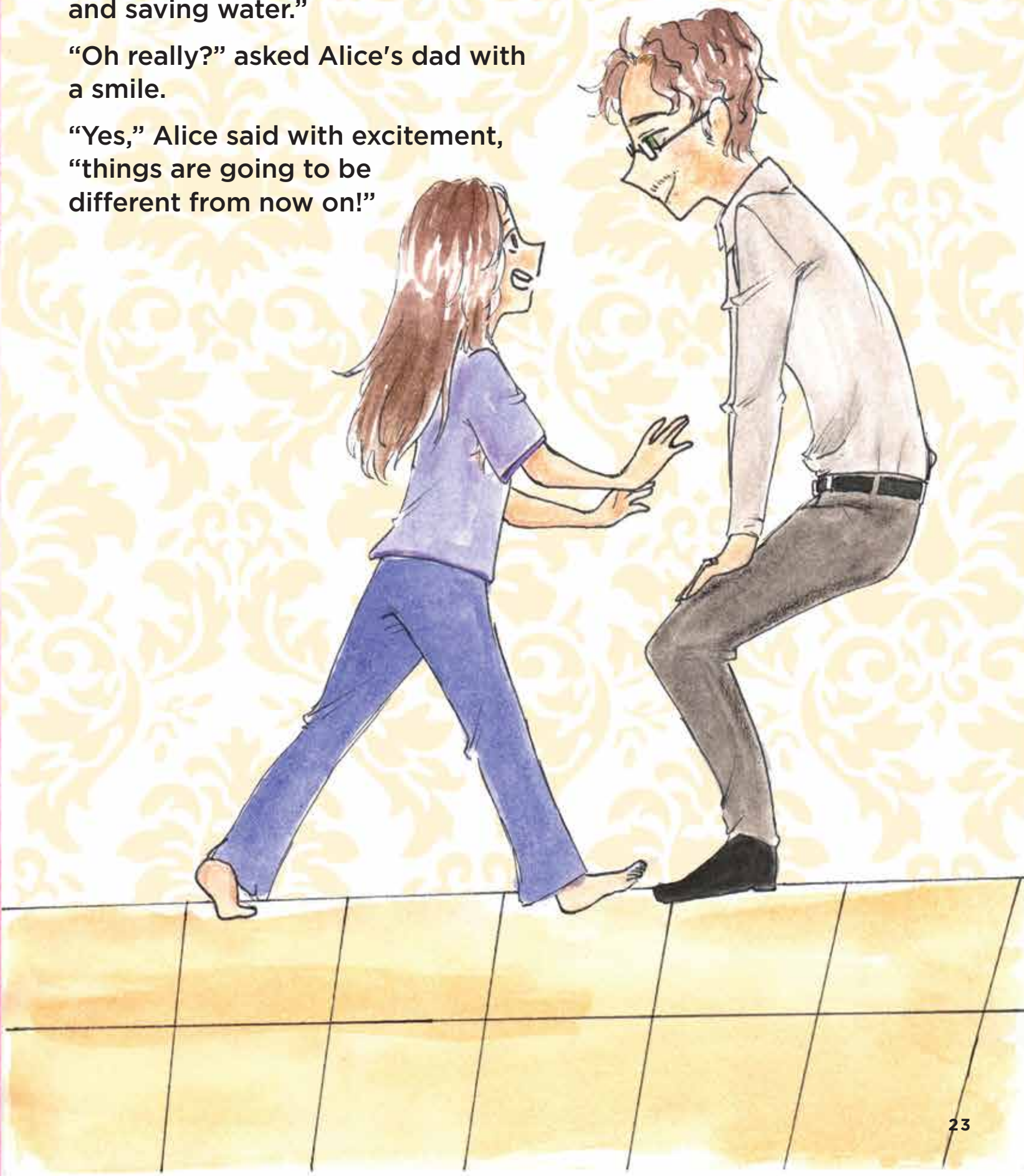


"What is going on?" asked Alice's dad, as he saw Alice in the hallway.

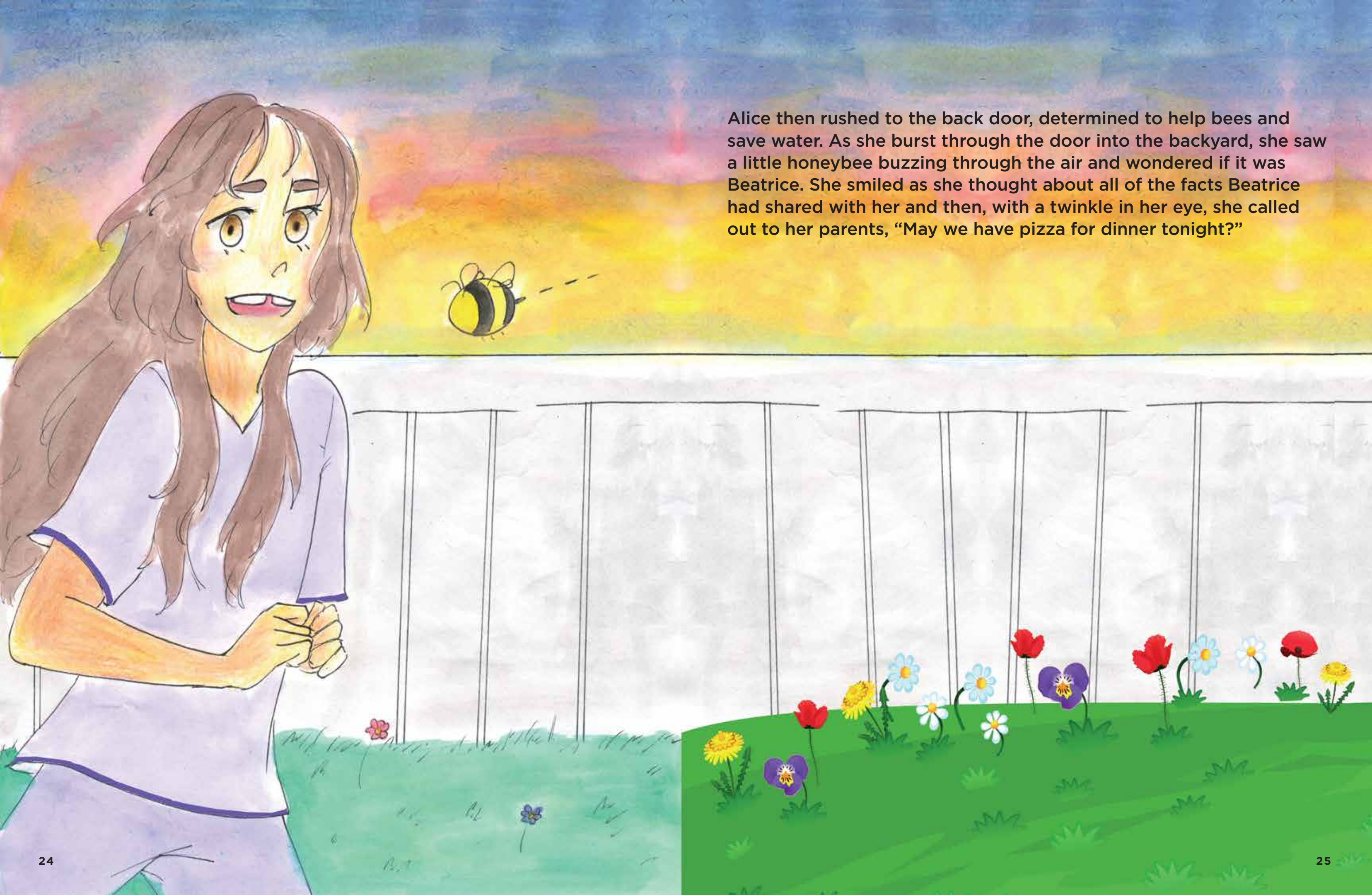
"I turned into a bee and went to a garden where everything was huge," said Alice. "I learned about bees and saving water."

"Oh really?" asked Alice's dad with a smile.

"Yes," Alice said with excitement, "things are going to be different from now on!"







Alice then rushed to the back door, determined to help bees and save water. As she burst through the door into the backyard, she saw a little honeybee buzzing through the air and wondered if it was Beatrice. She smiled as she thought about all of the facts Beatrice had shared with her and then, with a twinkle in her eye, she called out to her parents, “May we have pizza for dinner tonight?”



Alice later grew-up  
to be a beekeeper.





# Vocabulary Words

**Beekeeper:** A person who raises bees.

**Crop:** A plant or plant product that is grown by farmers.

**Drone Bee:** A drone is a male bee. Unlike the female worker bee, drones do not have stingers and do not gather pollen and nectar. A drone's primary role is to mate with a fertile queen bee.

**Farming:** The job or business of running a farm.

**Fertilization:** The state of being fertilized.

**Garden:** A piece of ground in which fruits, flowers, or vegetables are grown.

**Giant:** An imaginary person of great size and strength.

**Hive:** A container for housing honeybees.

**Honey:** A thick, sweet substance made by bees.

**Honeybee:** An insect with four wings that is related to the wasps, gathers pollen and nectar from flowers from which it makes beebread and honey for food, and usually lives in large colonies.

**Larva:** The active immature form of a bee.

**Nectar:** A sweet liquid produced by plants and used by bees in making honey.

**Ovule:** The part of the ovary of seed plants that contains the female germ cell and after fertilization becomes the seed.

**Pistil:** The female organs of a flower.

**Pollen:** The substance that causes plants to form seeds. Both flowering plants and conifers (plants that grow seeds inside cones) make pollen. A grain of pollen is so tiny that it is best viewed through a microscope.

**Pollinate:** Convey pollen to or deposit pollen on (a stigma, ovule, flower, or plant) and so allow fertilization.

**Propolis:** Bee use this as glue for unwanted open spaces in the hive.

**River:** A large natural stream of water flowing in a channel to the sea, a lake, or another river.

**Royal Jelly:** A substance used by worker bees to feed the larvae being raised as potential queen bees.

**Stigma:** The part of a pistil that receives the pollen during pollination.

**Sting:** The burning itching swollen lesion produced by the stinging of a bee.

**Queen Bee:** The single reproductive female in a hive or colony of honeybees.

**Wasting:** Use or expend carelessly, extravagantly, or to no purpose.

**Water:** A colorless, transparent, odorless, tasteless liquid that forms the seas, lakes, rivers, and rain is the basis of the fluids of living organisms.

**Water-Wise:** To be smart about water use by using water efficiently.

**Worker Bee:** Like the queen bee, worker bees are all female. They are smaller, their abdomens are shorter, and on their hind legs they possess pollen baskets, which are used to tote pollen back from the field. The life span of worker bee is a modest six weeks during the colony's active season.





## Natalia Fernandez



My name is Natalia Fernandez. I am an 8th grade Jr. Scholar and I attend Vista Verde Middle school. I enjoy playing the piano, hanging out with my siblings, baking with my mom and football Sundays with my dad (GO PATRIOTS). Being able to write "Bee" yond the Water-Wise Garden" was an amazing experience and I couldn't have done it without the help of my team (Vanessa, Jude, and Paulina) and My teacher Mr. Jimenez. I would like to thank EMWD for this opportunity and my family for always supporting me in what I do.

## Jude McLean



I'm an 8th grade Jr. Scholar student attending Vista Verde Middle School who has a passion for science and math. At the age of nine, I developed an interest in space and astrophysics furthering my love for not only math and science, but sci-fi as well. I am a fan of several famous sci-fi TV shows and authors, including but not limited to, Doctor Who and H.G. Wells. I absolutely love math and science and am constantly conducting independent research on the two to further expand my interests. I specifically look into astrophysics the most, deepening my love for the two subjects. I also have played multiple instruments such as the drums, trumpet, and violin. I am currently attending practice for drums at Riverside Academy of the Arts and have fallen in love with it. I recently received a drum set for Christmas, much to my surprise, and have managed to play it every day since then.

## Paulina Ortega



I'm Paulina Ortega and I am an 8th grade Jr. Scholar at Vista Verde Middle School. Some things I enjoy doing include playing soccer, playing the ukulele and guitar, and watching Netflix. I'm obsessed with Harry Potter and Riverdale. In my free time I look at memes and dead Vines. I'd like to thank my family and friends for their support in writing this book and EMWD for giving me this wonderful opportunity.

## Vanessa Ycu



My name is Vanessa Ycu and I am an 8th grade Jr. Scholar at Vista Verde Middle School. My hobbies are reading, writing, drawing, listening to music, and playing video games. I take pleasure in spending lots of time with my friends and family while treasuring the time I'm able to have by myself. I have a wide range of animated films and shows that I know and love and take lots of inspiration from, like Rebecca Sugar's 'Steven Universe' or Hayao Miyazaki's 'Spirited Away'. When I become older, I hope to one day land a job having to do with art; like a videogame designer or a book illustrator.

## Mr. Jimenez



My name is Juan Jimenez and I've been in education for eight years. I currently teach at Vista Verde Middle in Moreno Valley. I developed a passion for literature and reading while I was serving in the United States Marine Corps. I was deployed with HMLA-775 in support of Operation Iraqi Freedom and Operation Enduring Freedom in 2004 and 2005 where I found my calling as a teacher. After leaving the military I earned my Bachelor of Arts degree in literature from California State University, San Bernardino and a Master of Science degree in Education from California Baptist University. I love reading, traveling, and spending time with my son.

## Acknowledgements

### A Word from the Creator of the Write-Off Program



My name is Malea Ortloff and I am a Public Affairs Officer (Education) for EMWD. Now in its tenth year, I developed the award-winning Write-Off program in 2008, in an effort to encourage a greater understanding of our most precious resource—water—in both elementary and middle school students. By using a cross-age approach to learning, older students write stories focusing on water-related issues directed toward younger (elementary) students. The program is also cross-curricular because it involves language arts and science. I have also developed and designed curriculum around many of the winning stories, which is grade-level appropriate and keeps the water message continuing in the classroom for about six weeks instead of one day.

I began my career with EMWD in 1985 and have enjoyed every aspect of my time here with this incredible organization. I plan to retire at the end of 2018 and want to offer a special thanks to the management of EMWD for providing me the opportunity of a lifetime. Thanks to my many friends and co-workers for being more like a family than co-workers. I also want to offer my sincere and heartfelt thanks to Ailene Earl for being my treasured assistant for the past ten years. You are an incredible educator who has positively impacted thousands of students. I will forever remember your amazing stories and your words of, "I'm on it, Boss!" with a smile! It has truly been a joy to work with you. Finally, I would like to thank my family for their unending love and support. I love you Don, Lisa, Lori, Jeremiah and Savannah. Now it is time for me to buzz into retirement. Keep up the good work everyone!

This year the theme focused on the important roles bees have in sustaining life on our planet. Special thanks to EMWD employee Katrina Crompton for sharing information with the management of EMWD, which resulted in the implementation of a policy to humanely move bees that may be located in or around an EMWD facilities.

Funding for the Write-Off contest is sponsored in part by Rancho California Water District (RCWD). To date 18 books, written and/or illustrated by middle school students, have been published.

All of the winning Write-Off stories are available to schools and libraries within the EMWD/RCWD service areas and are also available as eBooks on the EMWD/RCWD websites. Check out the EMWD website ([www.emwd.org](http://www.emwd.org)) to read all of the stories.

EMWD wishes to thank the following students, teacher, graphic designer, editors, and advisory committee members for their collaboration and contributions in the development of this book.

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