Education Overview & Update

Puppet Shows
pre-K through 3rd

This year's puppet show is
"Turtles from Outer Space"

ELEMENTARY SCHOOL PRESENTATIONS

Grade 1 – H.2.Grow Students play a game in which they move drops of water from underground, up the roots of plants, through the stem, out of the leaves and into the clouds. When enough water has collected in the clouds, it rains. Find the activity guide with standards covered here.

Grade 2 – Water Year 'Round: Students solve the riddle, *"Which season am I?"* Each clue shows a phase of water that students link to sounds of percussion instruments. Find the activity guide with standards covered here.

Grade 3 – Incredible Journey: Students roll the die and move through the water cycle, collecting colorful beads to make their own bracelets along the way. Find the activity guide with standards covered here. We have created Informational Text about plant adaptations to supplement this lesson, which comes with vocabulary words and questions. It is also available in Spanish.

Grade 4 – Click here to learn about the RIO Field Trip for all Albuquerque area fourth grades.

Grade 5 – Leaky Faucet: Students learn how little fresh drinking water we have on earth. They measure and calculate how much water is wasted in a leaky faucet. Find the activity guide with standards covered here. We have created Informational Text about the water available on earth to supplement this lesson, which comes with vocabulary words and questions. It is also available in Spanish.

MIDDLE SCHOOL PRESENTATIONS

Grade 6 – The Water-Energy Connection: Students must supply water and electricity to their town. They'll quickly discover that they can't get electricity without water, and they can't get water without electricity. Our movie, *The Power Couple* is a good introduction or summing-it-up resource. Find the activity guide with standards covered here. We have created Informational Text about power generation for Albuquerque to supplement this lesson, which comes with vocabulary words and questions. It is also available in Spanish.

Grade 7 — Mighty Macroinvertebrates: Students will use math and sampling techniques to simulate a bioassessment. Using a net to scoop up colored beads that represent macroinvertabrates, they determine the relative health of their water sample. Find the activity guide with standards covered here. We have created Informational Text about pollution in the river and dogs to supplement this lesson, which comes with vocabulary words and questions. It is also available in Spanish.

Grade 8 — Go with the Flow: Using trial and error, students determine the height they must build their reservoir so that water will flow to homes upon demand Find the activity guide with standards covered here. We have created Informational Text about how evaporation affects water storage to supplement this lesson, which comes with vocabulary words and questions. It is also available in Spanish.

HIGH SCHOOL PRESENTATIONS

Biodiversity is Grand: What are invasives? Why are are our cottonwoods in peril? Cover your bosque board to learn how our decisions impact the future biodiversity of NM. Find the activity guide with standards covered here.

Pollution Detective: Students use pH paper to search through their plot of dirt to find the source of groundwater pollution. If it's out of sight, should we keep it in mind? Find the activity guide with standards covered here.

What Scientists Do with Number One and Number Two — Students fill their plastic cup toilet with wastewater and figure out how to clean it. After they separate water, trash, and sludge, they learn what Albuquerque's Wastewater Treatment Plant does with each. Micrographs and videos of our microscopic workers cleaning water are always a big hit! Find the activity guide with standards covered here. Take a digital tour of the wastewater plant as a way to introduce the lesson or review.

Hands-on Experiments and presentations for 1st -3rd, 5th-12th

WATER UTILITY AUTHORITY
ALBUQUERQUE BERNALILLO COUNTY

We bring Albuquerque area fourth graders to the river!!

Free Field Trip for all 4th Grades in the area!

We want everyone to be a good steward of our water resources. That's why we are dedicated to taking all APS fourth-grade classes on a field trip to the river. There is no cost to teachers or schools. The Water Authority provides free roundtrip bus transportation for area fourth-grade classes. We do not supply lunches or water.

Our education coordinator assigns a date to each school. **Please register here** so we have your current contact information, and can provide your students with the valuable experience of going on this award winning field trip!

The RIO Field Trip takes place at either The Rio Grande Nature Center or The ABQ Botanic Gardens. Each class has a Water Authority guide who leads the class in three activities that come with standards.

- *Albuquerque Waters* teaches students about where the water in the rivers and aquifers comes from. Students learn how precious our water is, here in the desert.
- Students learn about Cultural Water Use, NM history, and how we use virtual water to make everything we use or consume.
- Everybody's favorite, is the hike in the bosque.

We pay for
Buses and occasionally provide chaperones

About ¼ of the students we take didn't know the Rio Grande was part of the city,

about ½ have never been to the river.

Have You Ever Wondered How We Clean Wastewater?

Then this Tour Is for YOU!

Would you like to take your students on a field trip they won't forget? For grades 5th grade and up, you can bring them to the Southside Wastewater Reclamation Plant (SWRP). We clean approximately 50 million gallons of wastewater every day, but most of us never stop to wonder about what it takes to accomplish that. Our employees work:

- to ensure public and environmental health,
- to maintain good water quality of the water we put into the river, and
- to reclaim a portion of our water resources for re-use.

During the two-hour tour, students will do more than just hear about how we clean Albuquerque's wastewater, they'll see it. We look under the microscope at a drop of activated sludge to see the microorganisms that clean the water. We walk the plant following the path of the wastewater as it is cleaned. At the end of the tour, standing on the banks of the Rio Grande where the cleaned water is released into the river, we discuss current wastewater issues.

Tours are approximately two hours long, cover about 2 miles, and stairs are involved. We can accommodate up to 40 students per tour. There is no cost for the tour, but we do not provide transportation to or from SWRP.

This fantastic clay animated tour of our facility by Sharon Sivinski is a great way to prepare or review the trip!

Click here to schedule a tour.

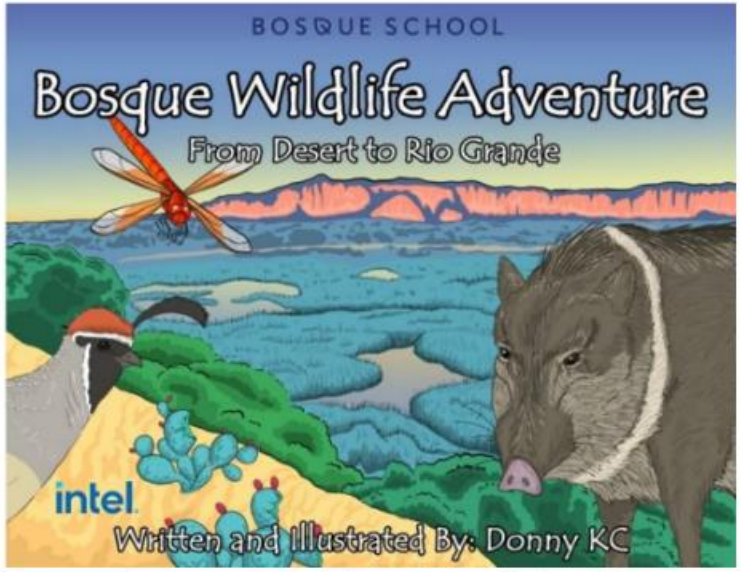
ADDITIONAL RESOURCES

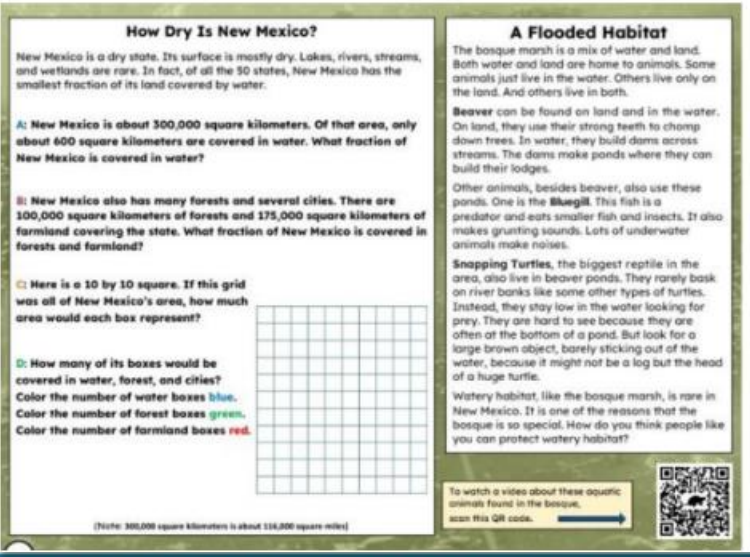
Take the virtual tour of our drinking water or wastewater treatment plants. Learn more about the history of sanitation here.

Questions? Call Jeff Tuttle at (505) 289-3027 or email jtuttle@abcwua.org

Reclamation Tours pre-K through 3rd

We added a new clay animation tour video as supplemental material.





Last year we added a preparatory visit before the field trip, and a book we left behind for each 4th grade classroom.

This year we revised the book, and through a grant with Intel and collaboration with Bosque School, each 4th grader now gets the book, with enough for the next 2-3 years.

The collaborative work with Bosque School has led to other developing work:

We are working on planning a classroom building in partnership with Bosque School. The building will provide a permanent home for our flagship program as well as westside outfall tours, and an opportunity to be a hub for other conversations and presentations around water and the environment.

Video Here

Water Ways to Boost NM STEM

A Gathering for New Mexico
Water/Irrigation/Utilities staff to
Support K-12 Water Conservation Education

Thursday 26 March 11:30am to 3:30pm
Bosque School, Albuquerque

When I was a boy, water hadn't even been invented yet. They gave us a pair of rocks, some hydrogen, and a bit of oxygen and said, "Get to work."

As the saying goes, "Whiskey is for drinking and water is for fighting over." Plenty of time and money have been spent on water disputes. Yet, somehow or another, for more than 20,000 years, people have figured out how to mostly work together and even thrive in the arid landscape of what is now New Mexico. Join us for lunch and a discussion about: how we support K-12 water conservation education in New Mexico; what resources and methods are currently being used and how we might replicate them in other areas; and discuss what else we can do to Boost NM STEM through water education.

WHEN: Thursday 26 March 11:30am to 3:30pm. Lunch provided.
Please Register in advance: Here is the registration llink
WHERE: Bosque School. 4000 Bosque School Road NW, Albuquerque, NM 87120

With financial support from Intel, and building on the theme of a shared river and its watershed, we are hosting a resource sharing event for public information, education, and other staff from water/waste water utilities, acequia associations, and other water managers along the Rio Grande and its tributaries.

There will be time for participants to share what they are doing to support Science, Technology, Engineering and Math (STEM) through water conservation education.

This will include us sharing, free of cost to those agencies, educational materials and curriculum we have developed and that are available to teach STEM focused water, fisheries, and related education.

Based on feedback we receive from participating water utilities staff we will refine existing materials to better serve a wider audience.

BOSQUE SCHOOL

CEBRIN

intel

For questions or information dan.shaw@bosqueschool.org (505) 401-4226

A share fair for water and environmental education folks along the bosque to talk to each other, March 26th

Coming to a summer near you…

A city-wide scavenger hunt promoting community and sustainability.

- June 20th- July 12
- Points for walking, riding, taking a bus, reusable water bottle…
- Participants:
  - The City Libraries
  - Museums: Wheels, Explora, NM Natural History
  - The Zoo, Aquarium and Botanic Garden

"Conserving anything conserves water, because water is in the production of everything!"

WATER UTILITY AUTHORITY
ALBUQUERQUE BERNALILLO COUNTY

Developing:
Bear Canyon Tour
(non-technical)
and
Surface Water Plant Tour