



2015-2016 Mid-Year Report

RiverXchange is an innovative outreach program that combines a year-long curriculum about stormwater, municipal water, and riparian habitat, with service-learning field trips and online class partnerships, giving New Mexico 5th grade teachers and students a broad understanding of how they can protect local water resources.

RiverXchange leverages relationships with a wide network of agencies to bring technical expertise directly to participants through classroom presentations, as well as field trips, which engage students in riparian restoration and water quality testing. This direct communication between water resource managers and young citizens encourages students to engage with these issues.

Long-term engagement with the topic from many different perspectives helps participants develop a more personal connection to their own river ecosystem. This sense of stewardship motivates and empowers students to conserve and protect water resources.

Writing to online pen pals reinforces knowledge by requiring them to explain concepts in their own words, and persuasive writing assignments help them develop critical thinking skills. Other creative projects, such as videos and shared photo documentation of their learning, demonstrate students' use of technology. Posting their projects, assessments and reflections about their experiences on their Kidblog site gives students a safe platform to share their knowledge and interests concerning critical water-resources issues not only with their partner class, but with all classes involved in RiverXchange.

The program is exciting for students, so there is an increased likelihood that they will influence their families, friends and other students by sharing their learning experiences, leading to behavior change in the larger community. Through participation in real environmental restoration projects and teaching others about watershed issues, we believe students will be inspired to put these skills to use outside of school and grow up to be environmentally responsible citizens.



Program Highlights:

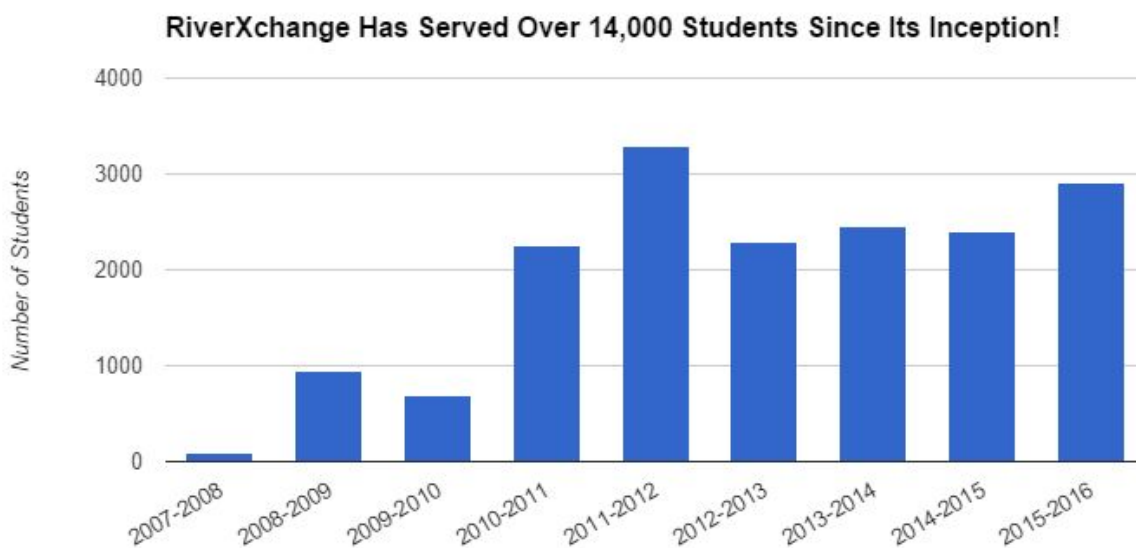
- 45 New Mexico classes, 1150 students
 - MRGSQT (30 classes – 750 students)
 - SSCAFCA (15 classes – 400 students)
 - NFWF - Field trips 30 classes for the year - 1,150 students total
(16 classes completed to date, 400 students contributing 1,260 hours of riparian restoration)
 - Rolling River Presentations for 24 classes, 600 students
- 63 Partner classes, 1756 students
- Each student spends at least 25 hours engaged with the program over the course of the school year
- 184 hours of in-class presentations
- Guest presenters have contributed 120 hours delivering in-class programs
- 4,025 student-hours of riparian restoration
- We see evidence of critical thinking in students' writing and creative projects on each classroom's Kidblog
- Students completed Pre-Survey in September. Post-Survey will be completed in May and results will measure students' learning and assess specific behavior changes
- Teacher survey results will be compiled by May 31 and inform future program planning





The Numbers:

	Students	Classes
Albuquerque	686	27
Total Bernalillo County	686	27
Placitas	19	1
Rio Rancho	413	15
Unincorporated Sandoval County	32	2
Total Sandoval County	464	18
Total New Mexico	1,150	45
Partners	1756	63
Program Total	2906	108





Participating Schools:

Bernalillo County

Arroyo del Oso Elementary (3)
Bandelier Elementary (1)
Cochiti Elementary (2)
Edward Gonzales (6)
Georgia O'Keeffe (2)
Lew Wallace Elementary (1)
Los Ranchos Elementary (2)
Monte Vista Elementary (3)
Mountain View Elementary (2)
Osuna Elementary (3)
Zia Elementary (2)

Sandoval County

Cochiti Elementary & Middle School (2)
Colinas del Norte Elementary (3)
Maggie Cordova (2)
Martin Luther King Elementary (5)
Placitas Elementary (1)
Rio Rancho Elementary (5)

Upcoming Field Trips:

Please call Bonnie Schmader at 999-9679 for details and directions to the site.

All field trips are at the Shining River bosque access. Students arrive at 9:45am and leave at 1:00pm.

January 21 - Colinas del Norte Elementary
January 22 - Martin Luther King Jr. Elementary
January 29 - Georgia O'Keeffe Elementary
February 4 - Cochiti Pueblo Elementary
February 5 - Zia Elementary
February 10 - Los Ranchos Elementary
February 11 - Colinas del Norte
February 12 - Rio Rancho Elementary
February 18 - Rio Rancho Elementary
February 19 - Martin Luther King Jr. Elementary
March 3 - Martin Luther King Jr. Elementary
March 4 - Rio Rancho Elementary
May 11 - Cochiti Elementary (location is at Tingley Wetland)





What Students Are Saying:

(Albuquerque, NM)

From Soren and Aaliyah:

How can we protect our storm water? Well first, we could stop pollution from entering storm drains and flowing into rivers. Storm drains are those holes on the street. To prevent that horrible pollution, you can pick up after your pet and not litter your trash.

(Washington)

-Dear Soren and Aaliyah

Thanks for the video, it was great. i learned a lot about how polluted the water in the world is and how people suffer without fresh water. Also, I learned how terrible it is for the animals. Do you have any ideas to try to save water?-Vanshita

(Washington)

-From David and Hailey:

It's important to protect storm water because it heads straight back to our rivers and lake and gets are water dirty so we can't use it and it kills the fishes and it hurts animals.

We can protect are storm water by picking up our dogs poop, recycling, picking up trash, not pouring oils outside, and don't flush trash down the toilet.

(ISRAEL)

-Hi we are Lorenz and Johannes.I am Lorenz I like Harry Potter,ballet and math.I am Johannes I like soccer and my favorite animal is a rabbit. Who rolled around the wall in the video without talking? That machine that the boy used to speak is very interesting. How does it work? It gets very hot where you live. Does the river evaporate because it is so hot? We have that problem with the Dead Sea here.

(New Mexico)

Hi, my name is Ella, just like the girl in your class. We have a lot in common Ella. My favorite color is green, blue, and black. My favorite subject is math, because I am really good at it and I am clumsy. Our river is the Rio Grande if you are wondering. The Rio Grande is one of the longest rivers in our country. Do you know anything about our river? And what is the C&O canal? Also, the Rio Grande is the 21st longest river in the world and the 5th longest in the North America.

(Maryland)

-Hello Ella. My name is Ella as well. You are correct, we are a lot alike. The C&O Canal is a canal that closed down in 1924. It was supposed to go from the Chesapeake Bay to Ohio River but after many years they decided to stop working on it. A canal is like a street but with water and boats instead of cars and concrete.



(Maryland)

-It cool that the Rio Grande is the 5th longest river in North America. The C&O canal is a canal that runs along close to the Potomac River. The C&O canal construction started in 1828. It took 22 years to build! The C&O canal flows in between Cumberland and Georgetown. Also the canal closed in 1924. Did you know? The C&O in C&O canal stand for Chesapeake and Ohio River. That's where the canal was supposed to reach but it took longer than expected. So it never reached that. -Lillia

(New Mexico)

Surface water gets polluted by us throwing trash the It goes to the river when it rains. When farmers use chemicals to kill insects off plants that goes to the ocean and kills the fish . When you throw old medicine on the toilet then you flush it goes into the water we drink. This doesn't help our watershed or the environment. -Juan

(Iowa)

Hi, my name is Jonathan. I go to Oelwein middle school. I am a 6th grader. We are the Oelwein Huskies. The closest major river we have is the Mississippi River. It is 2,320 miles long! it starts at Lake Itasca in northern Minnesota. It's watershed is the 4th largest in the world and the watershed includes all or parts of 31 states and 2 Canadian Provinces. It covers 1.2 million square miles and 40% of the lower 48 states. Just a few facts about the mighty Mississippi. Sincerely, Jonathan

(Maryland)

-Hi i'm back to tell you more! we have three rivers. The Susquehanna River it is 464 miles long. it passes through New York, Pennsylvania, and Maryland-7 million people live on or near it. It provides HALF of the fresh water Inflow. The James river 348 Miles long and 8 major dams along its coast. The Potomac is near Washington DC and has over million people using it for water every day! -Breonna W.

(New Mexico)

Dear Pen Pal,

My name is Alissah. I live in the Rio Grande watershed. I learned that you should never throw plastic water bottles in a watershed, because they can flow into the ocean. A watershed can also be known as nature's kidneys, or a strainer, because it flows down lower land. I also learned it is a recreational area. Sincerely, Alissah



(New Mexico)

Dear friend,

My name is Ari. I learned about EROSION! If your wondering what that is, I can tell you. Erosion is when there's a rock or land and it might snow at night and, melt in the day and then and then the rock breaks down. That happens because when the snow melts it turns to water and dissolves the rock down to be thinner and look different the next day. A good and easy way to stop/slow down erosion is by vegetation! Vegetation is when planting trees, bushes, vines and lots of other plants. The plants help slow down erosion it. would be pretty cool to watch happen step by step (it would be pretty cool and tiring). This is what I learned about erosion. -Ari

(New Mexico)

Hello my name is Vash and me and my group are going to tell you what a watershed is. I like the Rio Grande because it is really the only source of natural water around! A water shed is all the land that leads the water into our river

(Connecticut)

-Hi Vash my name is Kevin R our river is called the Housatonic River we have different trees than you they are called desidguous trees. I am sorry if I spelled desidguous wrong. My favorite song is Watch Me Whip. What is yours I would like to know! -Kevin

*-Hey Kevin I was just learning about the deciduous forest and actually we do have deciduous trees even though were a desert deciduous trees are trees that lose there leaves and our rainfall stays and goes it soaks into the permeable surface like dirt,planters,annnd gravel!!The impermeable surface is concrete sorry if i spell anything wrong all the extra rainfall goes to our storm drains!
My favorite song is We are the champions by queen. -Vash*



(New Mexico)

Hello my name is Paco, and I live in New Mexico. We have been doing our river-x project. A watershed is when land feeds water into a body of water such as rivers, lakes, seas, and oceans. The name of our river is the Rio Grande. The journey our river takes is it starts in the Rocky Mountains and ends in the Gulf of Mexico, and travels over 2000 miles. The Rio Grand goes through Texas, Colorado, and New Mexico. Our river is muddy in some places, big in some places, and small in some places. We get 5-10 inches of rain every year, but we have got a lot of rain this year. The end of summer and the beginning of fall is our monsoon season. Sincerely, Paco

(Connecticut)

-Many greetings from Redding, CT. We are a New England State and we are in the North East part of the United States. Redding is a rural community for our area and there is a lot of open land. The water that we use and drink comes from underground wells. We are close to the Atlantic Ocean but we are only a few miles form the Long Island Sound. All the water in our area flows to Long Island Sound. We need it to stay clean because we swim and fish in that water. Here in Redding we have four watershed areas in our town. The biggest river is the Saugatuck River. We want to learn how we can help keep our water clean. -Christina

(CAMBODIA)

Hello! My name is Sreyneang. You can called SO.

I love to play sport and listen to music and audio. Also I like to make a quote when I doing something.

Have you seen my watershed or learned anythings. Here is the cool think about us, we are living on one of the river name Basic that has divided from Mekong river (a big flow river). Also there is current problem like trash, sewage, industrial pollution, over fishing and the building of dam. In the future, I will try to solve this issue. Who want to work with me?

(New Mexico)

-We have the same problems. I also want to help rivers some day! To be able to help all the animals that need the water and be able to save all these fish and let them survive. Our river was pretty much destroyed by humans! At first our river was called the Rio Bravo, which means brave river, (Rio means river and Bravo means brave) it was full of life and there was a big amazing curving river! Until humans came and made it Rio Manso, and made it strait, killed animals and destroyed almost all the nature. Now we are trying to make it a better place, but humans are still destroying it with pollutants. Did you know we actually find bath tubs in our river! Comment back soon.-Maddoz

(CAMBODIA)



Sou Sdey! My name is Thiny. I am from Cambodia. I like English writing and my friends also said I am good at it. Cambodia's watershed is the Mekong River. Every time I go to my hometown, I cross the Mekong River using a ferry. This is what our ferry looks like.



Hello everyone! My name is Sythong I am 13 years old. I like fashion. I learn at Liger Learning Cener and I would like to share with you some information about Mekong River about. Mekong River flow through many countries such as China, Myanmar, Thailand, Laos, Cambodia, and Vietnam. In most of the countries Mekong is their water source. In cambodia 80% of the protein in their diet is from the fish from the Mekong River. The farmer in Vietnam use water from Mekong River and 50% of the water is used for iriigation. Mekong River few many names. The Chiness call it "Lancang Jiang" which means "Unstable River". Thai and Lao call it "Mae Nam Kong" which means "Mother Water". Vietnamese call it "Cuu Long" which means "New Deagons". The name Mekong means "The mother of water"

(New Mexico)

-Were having a water drought our self's so we Shure could use some of your water. In NEW MEXICO we also have a trash problem, where people are too lazy to pick up there dogs poop and the rain washes up the dog poop into the rivers and lakes polluting the water. Also for some odd reason people dump their old beds and bath tubs in the river even though that they know there's a dump!!! P.S I like the picture # :)



(New Mexico)

Nicole and Steve were talking about the commercial uses of the river. They talked about the 4 H program, the 4 h's stand for head, hands, heart, and health. They talked about different ways that people water different type of crops. The first way they talked about was flooding, flooding is where you just flood your crop with water at lot of times you might see people flooding Chile crops that use a lot of water. Another way that Nicole and Steve talked about is the sprinkler that is when water gets mist at the plants to grow a lot of times sprinklers are set up to spray for the time as needed. The last way to water crops is the drip system that is where a tube runs along a tree with a hole to allow the water to come out but not a lot of water comes out because plants that use a drip system most-likely those plants don't use a lot of water. I would have to say that the drip system uses a lot less water than the flood. -Lexi

