

# Bosque Ecosystem Monitoring Program

Black Institute for Environmental Studies at Bosque School

July 2014

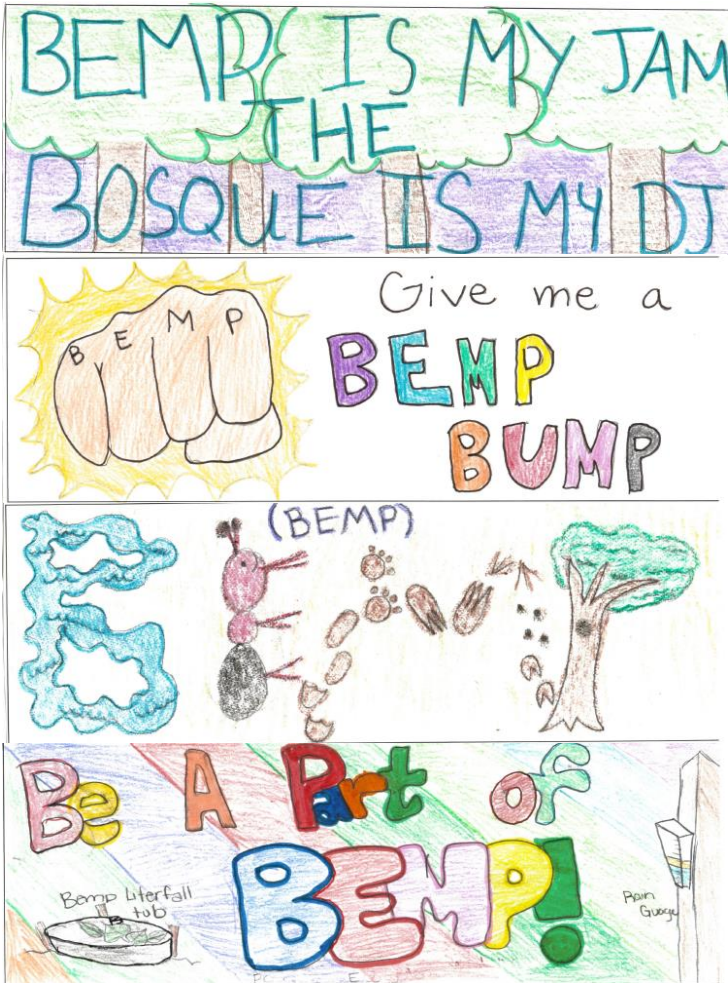
[www.bosqueschool.org/bemp.aspx](http://www.bosqueschool.org/bemp.aspx)

## The Students of Summer

~ take a look at who we hang out with during the HOT months ~

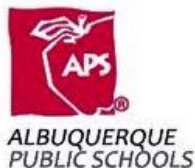
BEMP art inspires!

## APS in the Woods



Student artwork, top to bottom: Ashlee Olsen 6<sup>th</sup>, Maya Leitka 6<sup>th</sup>, Beia Smith Shaw 6<sup>th</sup>, Hannah Pacheco 6<sup>th</sup>

Submit BEMP-inspired artwork from a friend, student, teacher or colleague to Education Coordinator Kimi Scheerer at [kimi.scheerer@bosqueschool.org](mailto:kimi.scheerer@bosqueschool.org). BEMP works to highlight local artists and their abilities to visually connect us to the land we love, research and need to be healthy!



To Right: Rising 5<sup>th</sup> graders hike the woods to see the Rio Grande, beep a BEMP well and - for many - get a 1<sup>st</sup> glimpse into a different part of the city.

BEMP teams up with APS Summer Programs to get students into the bosque! In our first summer pilot, BEMP young professionals Sean O'Neill and Margaret Stebbins will hike with more than 20 classrooms of rising 4<sup>th</sup>-8<sup>th</sup> graders and their summer teachers.

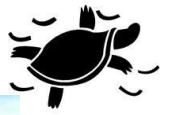
Our goal, to give students a peek into their local bosque and to connect with fundamental educational standards, comes alive in the forest. When students hike in the forest, visit the river and learn about local monitoring like BEMP, we hope to create FUN day of learning in Albuquerque's OUTDOOR classroom... the middle Rio Grande bosque.

Margaret and Sean have worked with the summer program teachers at Petroglyph Elementary, Arroyo del Oso & Jefferson Middle School to create a fun and educational morning in the bosque for each visiting class. They have done an outstanding job and we hope to offer the program next summer!

The BEMP school year calendar opens on **Friday, August 8<sup>th</sup>** for scheduling Study Trip adventures and classroom education!



# Young researchers and reptiles...



Black Institute summer research revolves around our very own aquatic hot spot... the school pond. Bosque School Wildlife Biology & Conservation students MacKenzie Walz (left), Casey Garrity and Elijah Martinez (on right) capture, tag and release turtles for a look at our local diversity and abundance. Currently the most common capture is the Painted turtle (*Chrysemys* spp.), well known for the easily recognizable red markings or 'paint' on its shell. The '**turtle team**' hopes to compare their campus results to various locations around town and gain experience in the field of herpetology!

## WATER IN OUR COMMUNITY



The Rio Grande springs out of the ground in the mountains of Colorado and travels nearly 2000 miles to connect our desert ecosystem to the global ocean via the Gulf of Mexico. Along its watershed rests multiple human populations and urban areas that contribute to the story of its health. Water conservation, noticing and talking about our human impacts and practicing healthy habits is necessary for the future of this great river. Help our community conserve our resources by practicing the following:

- turn off faucets
- take shorter showers
- landscape with native flowers, shrubs and gardens
- do full loads of dishes and laundry
- water outdoor plants during cooler temperatures and when seasonally appropriate
- SCOOP the POOP and keep *E. coli* out of our drinking water!



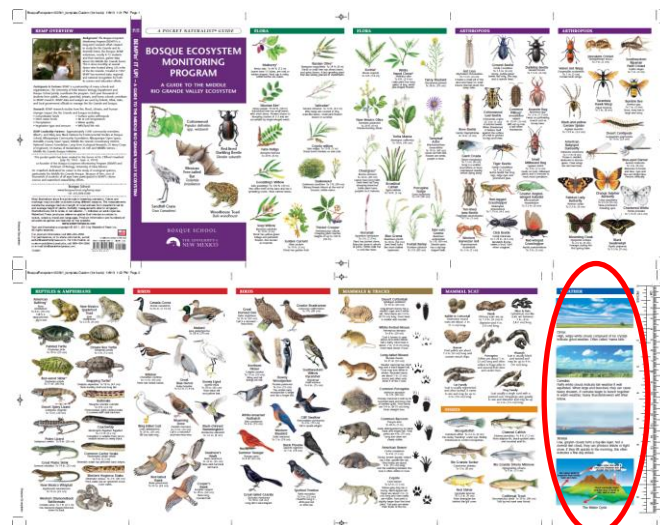
Image from and for more information, visit:  
[www.keepertheriogrand.org](http://www.keepertheriogrand.org)

## BEMP Pocket Guide (3<sup>rd</sup> Edition) August Availability

BEMP is happy to announce that we'll have our 3<sup>rd</sup> and most artistic printing of the popular BEMP Pocket Naturalist® Guide available in August. We've changed to a smarter, healthier and more pro-active panel for our 2014 release (image on left)!

The new Water in our Community panel features *Porky's Quest* illustrator Lauren Bennett's view of our watershed and lists various water conservation techniques for locals, visitors, newbies and life-long learners of all kinds.

BEMP's **Stormwater Science** education series, a part of the Mid Rio Grande Stormwater Quality Team ([www.keepertheriogrand.org](http://www.keepertheriogrand.org)), works to highlight the popular '**Scoop the Poop**' message to New Mexico residents along the Rio Grande and its tributaries.



An educational panel change to this guide will focus on water conservation and the health of our watershed!





## BACKPACKING in the Jemez... exploring the Rio's tributaries



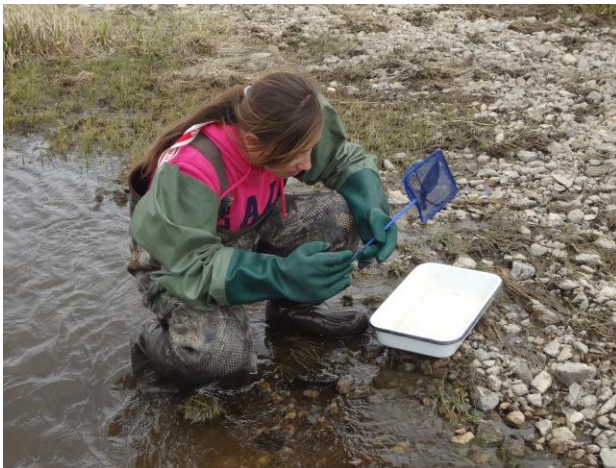
Taking eight middle school students into the heart of the San Pedro Wilderness to discover part of the Rio Grande's tributary systems is just another 'walk in the woods' for me, BEMP Education Coordinator, Kimi Scheerer. For 3 days and 2 nights (and organized through Bosque School summer programs) summer students got to experience a glimpse into the vast wilderness of New Mexico void of electrical outlets and urban stimuli. With 7<sup>th</sup> grade math and science teacher Tom Allen, the group traversed creeks, cooked meals in the back woods, listened to the words of Aldo Leopold and survived to tell the tale! ☺

## Summer camp *EXPLORATION* in the City



Students in BEMP's summer programs at Bosque School have been exploring the valley from the top of the volcanoes down to the Rio. In June, middle school students learned about how their community impacts the bosque during a sustainability and leadership program. 1<sup>st</sup>-3<sup>rd</sup> graders learned about the wondrous water web and wildlife and loved catching frogs in the pond! In July, 4<sup>th</sup>-6<sup>th</sup> grade students are having a biology bonanza and becoming wacky wildlife biologists while hiking in the bosque and helping out with BEMP's monthly monitoring. BEMP Educator Kelly Steinberg keeps kids engaged and enthusiastic while roving the woods in our 6 weeks of offered programming!

## Watershed *MONITORING* at the Valles Caldera



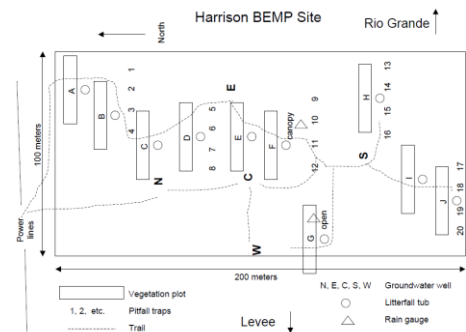
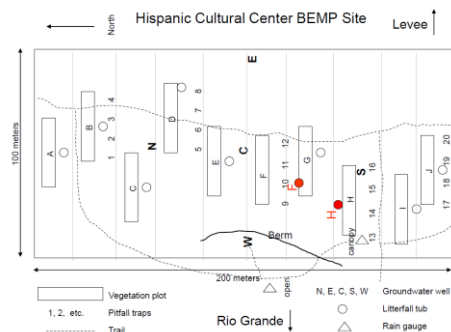
In partnership with the Nature Conservancy, on Wednesday, May 8, BEMP Science Coordinator Jennifer Schuetz led two 7<sup>th</sup> grade classes from Albuquerque's International School, to the Valles Caldera. While there for a day of adventure, the students also compared water chemistry and aquatic invertebrates in a stream draining from a burned area and an unburned area of the Jemez Mountains. The students said it was the best study trip of the year and loved getting their hands and feet wet, poking through samples and testing water quality! Special **THANKS** to Melissa Dean with the US Forest Service and Britteny Van Der Werff with Valles Caldera Trust for your partnership help!

# University of Georgia

## Students monitor 2 local BEMP sites



BEMP Science Coordinator Jennifer Schuetz hosted University of Georgia students enrolled in an 8-week-long field class that stops in various ecologically-important areas around the U.S. They were in Albuquerque on Tuesday, June 17<sup>th</sup> to learn about BEMP. Supervised by their professor, John Kominoski, students participated in two monthly monitoring collections, comparing the National Hispanic Cultural Center site (an older cottonwood gallery forest, site map below on left) with the Harrison site (a young cottonwood- and willow-dominated site naturally established by flooding and still experiences flooding, site map on right). This is the second year BEMP has hosted these students and we hope to continue to participate in this awesome shared learning opportunity in years to come!



Odum School of Ecology  
The University of Georgia

THANK YOU THANK YOU THANK YOU  
to those that sponsor BEMP

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BOSQUE SCHOOL



### OUR MISSION

The mission of the Bosque Ecosystem Monitoring Program (BEMP) is collaborative **long-term** ecological monitoring of key abiotic and biotic processes and characteristics to promote continued education, understanding and stewardship of the riparian ecosystem to scientists, teachers, students, policy makers and the public.