

# Lehigh Valley Greenways Conservation Landscape SUCCESS STORY

By: Nurture Nature Center  
[www.nurturenaturecenter.org](http://www.nurturenaturecenter.org)  
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## Interactive Watershed Exhibit (2016)

### SUMMARY

Nurture Nature Center, a science-based community center in Easton, PA, installed a new interactive exhibit to teach watershed science. The Interactive Watershed Exhibit is an augmented reality sandbox that allows visitors to modify a sand landscape and use their hands to create rain. Water moves realistically through the sand landscape providing an engaging demonstration for teaching watershed science, hydrology, geomorphology, and more. The colored surface (based on elevation) and contour lines allow for teaching topography and map reading. The exhibit was constructed in house and opened to the public in October 2016. It has been very popular with visitors and enhanced NNC's educational reach.

### FUNDING

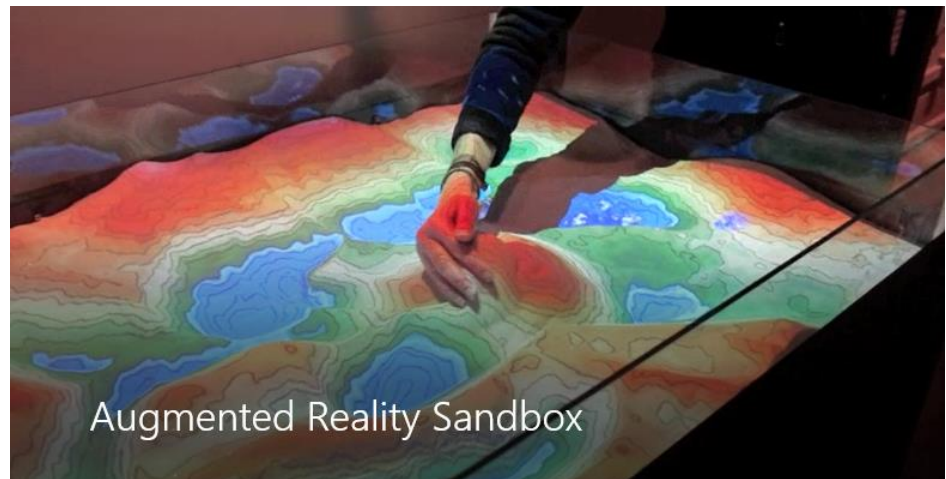
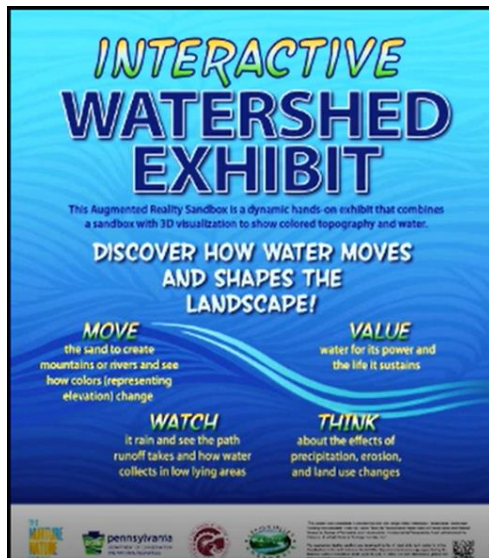
**Grant Award:**  
**\$2,395.00**

**Match:**  
**\$4,150.37**

**Total Project Cost:**  
**\$6,545.37**

### PARTNERSHIP IS KEY

**Nurture Nature Center (host site and educator)**  
**Bushkill Stream Conservancy (support and educator)**



### CHALLENGE

Nurture Nature Center (NNC) seeks to build the capacity of communities to understand and respond thoughtfully to local environmental challenges, initially focusing on flooding but expanding to climate change and other issues relevant to the local community. NNC needed an innovative and interactive way to engage youth and the public in learning about watersheds, topography, and the dynamics of earth systems including the water and energy cycle. Regularly hosting school visits for Science on a Sphere® (SOS) programs, NNC saw the opportunity to address the need for interactivity and capturing young visitors' active minds (and shorter attention spans!) with a hands-on science exhibit that allows children to explore while learning about the local watershed. While the SOS® exhibit is renowned for its ability to present global issues, NNC needed an equally compelling exhibit to connect children and adults to the local environment and to educate about natural processes such as flooding and how communities can be prepared to handle natural hazards.



## SOLUTION

By creating an exhibit that fosters play, the Interactive Watershed Exhibit captures and holds visitors' attention. The exhibit itself fosters the physical manipulation of the sand and water environment, poising visitors as makers of their own exploration and education. The exhibit is comprised of the sandbox as well as three large wall maps showing the topography, relief and watersheds of the local area. Supplemental worksheets are available for school visits and pictures of various landform types facilitate lessons on geomorphology. We created a hybrid Science on a Sphere® and sandbox program that teaches topography and earth systems at a global level on the Sphere, concluding with a local and interactive lesson on the sandbox. The exhibit has significantly enhanced our ability to provide a meaningful and memorable educational experience for our visitors.

## RESULTS

The impact of the Interactive Watershed Exhibit is difficult to quantify but easy to see. The Interactive Watershed Exhibit has provided a welcoming point of entry for many first-time visitors to NNC, who quickly identify the hands-on exhibit as an area to become comfortable at the center, meet staff, and introduce their families to the ideas of environmental education. Visitors light up when they see our sandbox. "Wow!" "That is amazing." "So cool." "Can I touch the sand?" are common refrains. Many whip out their phones to document and share with friends and family, saying "I have to show them this, it is so cool. Unbelievable." The exhibit hooks them, adults become children again, and everyone ends up spending a significant portion of their time at the exhibit. While the visitors are captivated by the sandbox, docents take advantage of the opportunity to educate. People are receptive and a rapt audience, exclaiming "I didn't know that" and asking questions. They become curious about their own watershed and use the three large wall maps beside the sandbox to find out where they live in the watershed and how the concepts they are learning relate to their personal experiences. NNC views the new exhibit as a smashing success and is thankful for the funding support from LV Greenways and DCNR.

### Contact

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