

# 2014 COMMUNITY AND YOUTH OUTREACH REPORT

## INTRODUCTION

Water Rocks!, in partnership with the Iowa Learning Farms program, had a banner year in 2014! We participated in 122 youth and community outreach events and had quality interactions with 15,170 people. **That is a 101% increase in the number of quality interactions from the previous year.** The events included indoor and outdoor classroom visits, library visits, county fairs, the Iowa State Fair\* and youth camps. The teacher evaluations were also greatly improved from last year with a **12% increase in overall quality of activities, a 21% increase in effectiveness of water quality lesson, and a 4% increase in effectiveness of the rainfall simulator lesson.** In short, Iowa teachers are giving the Water Rocks! team straight A's!

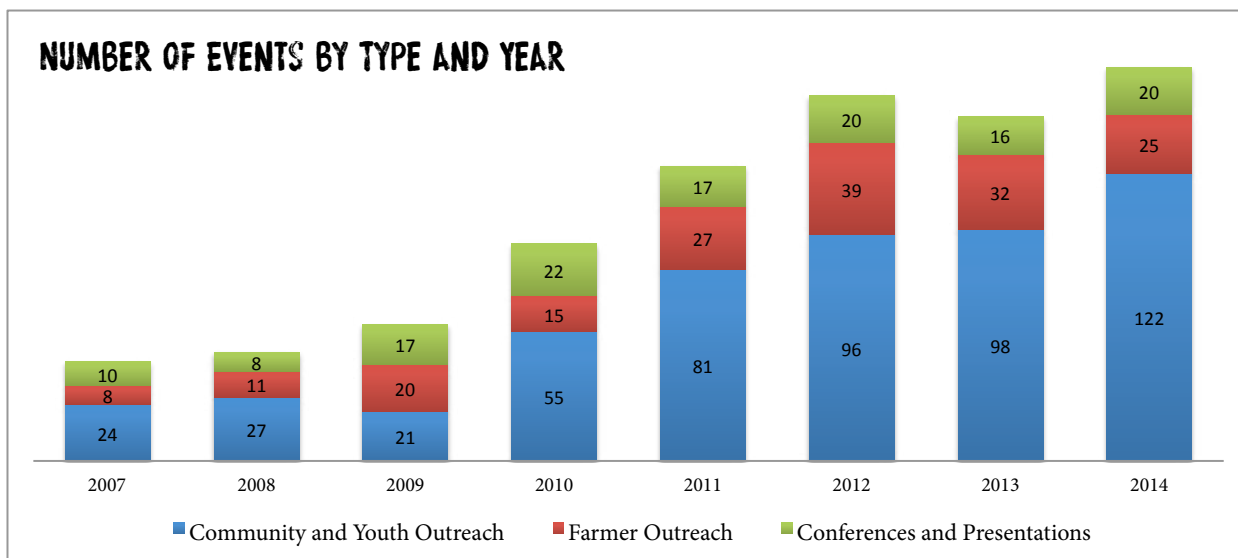
The inaugural Water Rocks! Summit for K-12 classroom teachers was held June 11-12, 2014, at the Iowa State University Alumni Center in Ames, summarized in the report titled "Water Rocks! Hosts Inaugural Teacher Summit."

## METHODOLOGY

**Questionnaires** with a return envelope were handed to teachers at each classroom event with a return envelope to help see how these individuals perceived our educational programming. We only evaluated the classroom events and not the community events. This allows us to keep track of what is connecting with the students and what needs to be adjusted according to the teachers who evaluate us. In this report we have evaluations from **74 different teachers in 40 different school districts.** The results show that the Water Rocks! presentations and outreach are well received and graded highly by Iowa's veteran educators.



Pictured above: Students play an epic game of Biodiversity Jenga.



\*Attending the Iowa State Fair certainly helped boost the overall numbers; however it was clever marketing and outreach activities (the Poo Toss) that made the difference. Even though the overall attendance for the Iowa State Fair was down in 2014, those who visited the Water Rocks! booth more than doubled from 2012. We talked with 4,481 people during our 11 day stay at the fair. On average, that's over 400 people a day!

## NUMBER OF YOUTH AND OUTREACH EVENTS BY MONTH

	2014	2013	2012
January	2	2	0
February	7	1	0
March	5	1	5
April	8	12	10
May	15	12	19
June	18	22	11
July	27	23	25
August	13	3	16
September	8	11	5
October	14	9	5
November	5	2	0
December	0	0	0
<b>Total</b>	<b>122</b>	98	96

The adaptation of our education modules for indoor and outdoor use has allowed us to participate in more outreach events in cold weather months, expanding our classroom outreach into February, March, and November.



Pictured above: Students play a game of Wetland BINGO. The adoption of indoor modules have made outreach easier in cold winter months.

DESCRIPTION OF AUDIENCES AT OUTREACH EVENTS					
	2014	2013	2012	2011	2010
<b>Age groups</b>					
<i>Primarily youth</i>	43%	28%	25%	27%	24%
<i>All ages</i>	28%	31%	34%	27%	27%
<i>Primarily adults</i>	29%	41%	41%	46%	49%
<b>Background</b>					
<i>Rural</i>	31%	41%	42%	52%	52%
<i>Urban</i>	28%	29%	21%	9%	14%
<i>Rural/urban mix</i>	41%	30%	37%	39%	34%
<b>Level of engagement*</b>					
<i>High</i>	92%	85%	91%	78%	78%
<i>Average</i>	7%	14%	8%	18%	15%
<i>Low</i>	1%	1%	1%	1%	7%

\*This information comes from evaluations that staff complete after every outreach event.

The Water Rocks!/ILF team was able to maintain a balance between reaching out to those in big and small communities as well as a good balance between youth and adults. The team took on more youth outreach events in order to meet the demand. This would explain the rise in *primarily youth* age group events. The high level of engagement is also a product of our ability to provide sound science through fun, educational and interactive means. The creation of new youth modules as well as the fleet of Conservation Station trailers helped achieve the high engagement from participants.



Pictured above: During our watershed module, students are given 5 million dollars to develop a piece of land. Then they must figure out what environmental impact that development will have on the nearby water body. Below: We welcome new members to the Conservation Pack.



## CLASSROOM EVALUATIONS FROM TEACHERS

Below are the results from the questionnaires that each teacher received during the visit. Overall, the results are very strong.

Number of teachers surveyed by grade of students taught		%
K-2	6	8%
3-4	28	39%
5-8	24	33%
9-12	1	2%
All ages*	13	18%

\*We visited several libraries that were all age events. Also, some teachers were responsible for multiple age groups and only returned one survey so those surveys were counted as all ages.

## RESULTS OF RETURNED SURVEYS

On a scale of 1 to 5, please rate the following (circle the number):

n=74	Excellent	Good	Average	Fair	Poor
Overall quality of Water Rocks! Conservation Station or indoor classroom activities	84%	16%	--	--	--
Effectiveness of water quality and conservation lesson	88%	11%	1%	--	--
Effectiveness of Rainfall Simulator at demonstrating connection between land management choices, soil erosion, and water quality	91%	9%	--	--	--
Engagement of educators – knowledgeable and concerned that students understood the material	84%	15%	1%	--	--

	Excellent	Good	Average	Fair	Poor	Response averages
Overall quality of Water Rocks! Conservation Station or indoor classroom activities	5 ↑	4	3	2	1	4.84
Effectiveness of water quality and conservation lesson	5 ↑	4	3	2	1	4.86
Effectiveness of Rainfall Simulator at demonstrating connection between land management choices, soil erosion, and water quality	5 ↑	4	3	2	1	4.91
Engagement of educators – knowledgeable and concerned that students understood the material	5 ↑	4	3	2	1	4.82



Pictured above: Students try to determine which objects would be found in a clean lake or a dirty lake.



Pictured above: Several families stop by to enjoy a little summer fun with the Enviroscape at the CS3.



## WATER ROCKS! IS MAKING THE GRADES WITH FLYING COLORS!



*In other words, if we were graded...*

	2014	2013	Change
Overall quality of Water Rocks! Conservation Station or indoor classroom activities	<b>97% (A)</b>	94% (A)	<b>+3%</b>
Effectiveness of water quality and conservation lesson	<b>97% (A)</b>	91% (A-)	<b>+6%</b>
Effectiveness of Rainfall Simulator at demonstrating connection between land management choices, soil erosion, and water quality	<b>98% (A)</b>	97% (A)	<b>+1%</b>
Engagement of educators – knowledgeable and concerned that students understood the material	<b>96% (A)</b>	96% (A)	0%

***“It was presented with high interest materials. A very positive impact.”***

***“The information and games were right on target!”***

***“Wonderful opportunity for our school!!”***

***“Super job – kids like to be active participant listeners!”***

***“The presenters were awesome with enthusiasm and knowledge!!”***

### CLASSROOM FOLLOW-UP

Along with in-class modules, educators are given enhanced learning materials that they can use to supplement their curriculum. A high percentage of teachers responded that they plan to use these materials. The questions below were asked of all the teachers who received a questionnaire.

*Please describe at least one way you will integrate the Water Rocks! conservation material in your classroom (Place “X” in front of all that apply):*

72% I will follow-up the Conservation Station/Water Rocks! visit with future discussion of watersheds and teamwork/ I will follow-up with future discussion of land management choices and conservation issues.

76% I will use the videos (Culture of Conservation Video Series) as a follow-up to the indoor/outdoor classroom.

77% I will use the music CD (Dogs, Frogs, and Nature Songs/Green) in my classroom.

4% I do not plan to use the Water Rocks! materials in my classroom.

**96%** of teachers said they would follow-up or use Water Rocks! materials in their classroom.

This cooperative project has been funded in part through Section 319 of the Clean Water Act. Water Rocks! partners include Iowa Department of Natural Resources (USEPA Section 319), Leopold Center for Sustainable Agriculture, Iowa Water Center, Iowa Learning Farms, Iowa State University Extension and Outreach, and personal gifts of support.